REPORTS OF THE DEPARTMENT OF CONSERVATION AND DEVELOPMENT STATE OF NEW JERSEY

C. P. WILBER, Director

BULLETIN 45

Geologic Series

NEW JERSEY GEODETIC CONTROL SURVEY BENCH MARKS IN ESSEX AND PASSAIC COUNTIES

Elevations and descriptions of 583 bench marks established in Essex and Passaic Countles including several in Bergen, Morris and Union Counties. The bench marks included form the Ess-Pas Level Net.



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Published 1937
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To the Director
N. J. State Board of
Conservation and Development
Trenton, New Jersey
Sir:

There are submitted herewith for your approval and publication additional level data obtained by the New Jersey Geodetic Control Survey covering parts of Essex, Passaic and Morris Counties.

The organization of this Survey, its purpose and the methods used in its work have been described in detail in Bulletin No. 44 published by you last year.

Again it was found by frequent connections with old bench marks established by the New Jersey Geological Survey in years past that settlement disturbed these old benches or that a subsequent least square adjustment of the U.S. Coast and Geodetic first order level net varied with results of the New Jersey Geological Survey. In order to avoid the discarding of work which was based on elevations given by the New Jersey Geological Survey, the elevations for bench marks established heretofore by state, county and municipal agencies should be given the corrections listed below for various areas.

In this Bulletin elevations for all old bench marks are given in accordance with results obtained by the New Jersey Geodetic Control Survey net.

The datum used for all elevations in this Bulletin is Mean Sea Level.

In this Bulletin all bench marks are grouped in runs which are named as shown on the accompanying map. Each run has a distinguishing designation, the first three letters of the county in which the major portion of the run lies and another distinguishing letter. Within the runs the benches are arranged in the same sequence in which they will be found in the field along the run from start to finish.

In order to find the bench marks existing in a certain locality, it is necessary to refer to the map on which are shown the location and the name of the various runs.

In this Bulletin there are included all elevations of first and second order bench marks established by the U.S. Coast and Geodetic Survey within the area of the net.

Respectfully submitted,

Arthur Noack, State Supervisor

NEW JERSEY GEODETIC CONTROL SURVEY

ESSEX-PASSAIC LEVEL NET CORRECTIONS

The following corrections should be applied to elevations originating from N. J. Geological Survey Benches in various localities.

Belleville	+.32	Montelair	+.37
Bloomfield	+.33	Morristown	+.32
Caldwell	4.19	Mountain View	03
Carlstadt	÷.37	Newark	4.34
Chatham	÷.46	Orange	4.28
East Orange	÷.4 0	Passaic	+.1 8
Hackensack	+.09	Paterson	09
Hanover	+.20	Riverdale	08
Little Falls	05	Rutherford	+.1 5
Millburn	4.28	Wayne	4.01
******		Whippany	4.17

LOCALITIES INCLUDED IN ESS-PAS LEVEL NET

Locality Arcola (Paramus) Carlstadt East Paterson Hackensack Hasbrouck Heights		PP-12 PAS-A-2,3 PP-12,13 PP-12
Lyndhurst Maywood. North Arlington. Paramus (Arcola). Rochelle Park Rutherford. Saddle River Township.		PP-10,11 PP-13 PP-10; ESS-D-1 PAS-A-4 PP-13 PP-11 PAS-A-4
Warren Point Woodridge Belleville	ESSEX	.PP-14; PAS-A-4 PP-12
Bloomfield. Caldwell. Caldwell Township. Cedar Grove. East Orange. Glen Ridge		-B-2; E3S-C-3,4 E3S-F-2,3 FAS-D-2,3 E3S-A-8,9,10 SS-E-2,3; ESS-G-1 ESS-C-4: ESS-G-1
Irvington Livingston Township Millburn Montclair Newark ESS-	ESS-B-J,4; ESS-J 6,7,8,9; PN-10; ES C-1,2; ESS-E-1; ESS- ESS-I-	9; ESS-A-3,4,11 -1; PAS-B-1 & 2 S-A-1,2; ESS-B-1 H-1,2,3; ESS-P-1 1,2,3; ESS-M-1.2
Nutley Orange Roseland Township South Orange Verona West Caldwell West Caldwell Township West Orange ESS-A-	ESS-A-8; ESS ESS-F-3; ESS-	PAS-D-5,6 PN-9; ESS-A-5 ESS-F-1,2

PP = U.S.C.& G.S. First Order Port Jervis, N.Y. to Ferth Amboy, N.J. PN = U.S.C.& G.S. Second Order Portland, Pa. to Newark, N. J.

MORRIS	
Y = 4 = 7 & Ave	Name of Run
Plantadale	PP-19
Boonton	
Pronton Mowneld's	
Putlan	FP-19: MOR-A-L
Chatham	PN-7,8; EDD-L-2,0
Chester Junction	
East Hanover Township	ESS~N-2,3
Florham Park	ESS-L-2
Hanover	
Hanover Township	.E3S-N-3; MOH-A-7,8
Kinnelon	mon-A-1,2
Madison	NOB A D 3
Montville Township	DN
Morris Plains	OF D. A. SCHOOL S. A. M.C.
Morris Township	MOR-4-8 9
ParsippanyESS-K-	2 3 4 MOR-4-5.6.7
Pequannock	PP-17.18
Pine Brook	ESS-K-1.2
Pompton Plains	
Riverdale	
Rocksway	
Tayl ortown	MOH-A-3
Whippany	ESS-N-3; MOR-A-7,10
<u> </u>	
PASSAIC	
Athenia	PAS-A-1
Athenia	
Athenia	FAS-A-1; FAS-B-1 6; PAS-B-1; PAS-B-1
Athenia	PAS-A-1; PAS-B-1 6; PAS-A-1; PAS-B-1 PAS-B-1
Athenia. Clifton. FSS-D-4,5, Great Notch. Little Falls. Mountain View	FAS-A-1; FAS-B-1 6; PAS-A-1; FAS-B-1
Athenia. Clifton. ESS-D-4,5, Great Notch. Little Falls. Mountain View. Passaic. Peterson. PP-14.15.16; ES	PAS-A-1 6; PAS-A-1; PAS-B-1PAS-B-1PP-16; ESS-A-11 PP-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-1 8S-D-6.7: PAS-A-2.3
Athenia. Clifton. ESS-D-4,5, Great Notch. Little Falls. Mountain View	FAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PP-16; ESS-A-11 P-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-1 S-D-6,7; PAS-A-2,3
Athenia. Clifton. ESS-D-4,5, Great Notch. Little Falls. Mountain View	PAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PP-16; ESS-A-11 P-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-1 BS-D-6,7; PAS-A-2,3 PP-18
Athenia. Clifton	PAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PP-16; ESS-A-11 P-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-1 S-D-6,7; PAS-A-2,5 PP-18 PP-19 ESS-A-10: PAS-D-1
Athenia. Clifton. FSS-D-4,5, Great Notch. Little Falls. Mountain View. Passaic. Paterson. PP-14,15,16; ES Pompton. Pompton Junction Singac. Totows	PAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PP-16; ESS-A-11 P-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-1 BS-D-6,7; PAS-A-2,3 PP-18 PP-19 PSS-A-10; PAS-D-1 ESS-A-11
Athenia. Clifton. Great Notch. Little Falls. Mountain View. Passaic. Paterson. Pompton. Pompton. Pompton Junction Singac. Totowa. Wayne	FAS-A-1 6; PAS-A-1; PAS-B-1
Athenia. Clifton. FSS-D-4,5, Great Notch. Little Falls. Mountain View. Passaic. Paterson. PP-14,15,16; ES Pompton. Pompton Junction Singac. Totows	FAS-A-1 6; PAS-A-1; PAS-B-1
Athenia. Clifton. Great Notch. Little Falls. Mountain View. Passaic. Paterson. Pompton. Pompton. Pompton Junction Singac. Totowa. Wayne	FAS-A-1 6; PAS-A-1; PAS-B-1
Athenia. Clifton	FAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PAS-B-1 PP-16; ESS-A-11 PP-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-2,5 PP-18 PP-19 ESS-A-10; PAS-D-1 ESS-A-11; PAS-D-1
Athenia. Clifton. FSS-D-4,5, Great Notch. Little Falls. Mountain View. Passaic. Paterson. PP-14,15,16; ESPompton. Pompton Junction Singac. Totowa. Wayne Wayne Township. UNION	PAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PP-16; ESS-A-11 P-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-1 S-D-6,7; PAS-A-2,5 PP-18 PP-19 ESS-A-10; PAS-D-1 ESS-A-11; PAS-D-1 PP-5,6; ESS-I-3
Athenia. Clifton. FSS-D-4,5, Great Notch. Little Falls. Mountain View. Passaic. Paterson. PP-14,15,16; ESPOMPton. Pompton Junction Singac. Totowa. Wayne. Wayne Township. UNION Elizabeth. Elizabeth Port	PAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PAS-B-1 PP-16; ESS-A-11 P-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-2,3 PP-18 PP-19 ESS-A-10; PAS-D-1 ESS-A-11; PAS-D-1 PP-17 .ESS-A-11; PAS-D-1
Athenia Clifton Clifton Great Notch Little Falls Mountain View Passaic Paterson Pompton Pompton Pompton Singac Totowa Wayne Wayne Wayne Lizabeth Elizabeth Elizabeth Linden	FAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PP-16; ESS-A-11 P-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-2,3 PP-18 PP-19 ESS-A-10; PAS-D-1 ESS-A-11; PAS-D-1 PP-17 PSS-A-11; PAS-D-1
Athenia. Clifton. FSS-D-4,5, Great Notch. Little Falls. Mountain View. Passaic. Paterson. PP-14,15,16; ESPOMPton. Pompton Junction Singac. Totowa. Wayne. Wayne Township. UNION Elizabeth. Elizabeth Port	FAS-A-1 6; PAS-A-1; PAS-B-1 PAS-B-1 PP-16; ESS-A-11 P-16,17; PAS-D-1,2 ESS-D-4,5; PAS-A-1 S-D-6,7; PAS-A-2 PP-18 PP-19 ESS-A-10; PAS-D-1 ESS-A-11 PP-17 ESS-A-11; PAS-D-1 PP-5,6; ESS-I-3 PP-5 PP-5

PP = U.S.C.& G.S. First Order Port Jervis, N.Y. to Perth Amboy, N.J. PN = U.S.C.& G.S. Second Order Portland, Pa. to Newark, N.J.

Essex Co. 1936

ESS-A Page 1

LL PAGES

BEGINNING AT NEWARK, N.J. AT MILITARY PARK, THENCE WEST TO HIGH ST. SOUTH TO SPRINGFIELD AVE., NORTH ON SPRINGFIELD AVE. THROUGH NEWARK AND IRVINGTON TO MILLSURN AVE. MAPLEWOOD: THENCE NORTHWEST TO WY-OMING AVE. THENCE NORTHEAST ON WYOMING AVE. THROUGH MAPLEWOOD AND SOUTH ORANGE TO GREGORY AVE. THENCE NORTHEAST ON GREGORY AVE. THROUGH WEST ORANGE TO MT. PLEASANT AVE.; THENCE NORTH TO PROSPECT AVE. AND NORTH ON PROSPECT (MT. PROSPECT) AVE. THROUGH WEST ORANGE AVE. AND VERONA TO THE POMPTON TURNPIKE (N.J. S.H. RTE. 23) THENCE NORTH ON RTE. 23 THROUGH VERONA AND CEDAR GROVE AND THROUGH SINGAC (PASSAIC CO.) TO N.J. S.H. RTE. 6 THENCE EAST ON RTE. 6 (UNION AVE.) TO D.L.AW. RR. IN LITTLE FALLS, PASSAIC CO. N.J.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY

- U 11 NEWARK, ESSEX CO. In Military Park, between Broad St., Park Pl. and Center St., about 100 ft. north of the centerline of Cedar St. 30 ft. east of the east curbof Broad St., 42 ft. north of a brass cannon, and in the top of the retaining wall of the subway entrance to the men's room, 2.5 ft. higher than the east curb of Broad St. A standard disk, stamped "U 11 1933" (A 1st order B.M.)

 Elevation: 12.467 meters 40.968 ft.
- 68.07 (NJGS)-37 (City of Newark) NEWARK, ESSEX CO. At the High St. entrance to the County Court House, at the north one of the two columns, and on the top of the northeast corner of the square marble base. A chiseled cross. (A lat order B.K.) Elevation: 20.852 meters 68.412 ft.
- Rv. 310 -NEWARK, ESSEX CO. On the south side of Springfield Ave., on the southwest corner of its intersection with Belmont Ave., at the main entrance to the Fidelity Union Trust Co. on the water-teble, about 18.00 ft. south of the south curb of Springfield Ave., 2.50 ft. above the 4th step and 3 inches northeast of the northeast face of the octagonal base of the most easterly round column. A standard monel rivet.

 Elevation: 133.771 ft.
- Rv. 309 NEWARK, ESSEX CO. On the south side of Springfield Ave., on the southeast corner of its intersection with Magnolia St. at s is story brick store and apartment, in the Magnolia St. entrance thereto, on the south end of the top of the bluestone dorsill, about 22.0 ft. east of the centerline of Magnolia St. and about 89.0 ft. south of the centerline of Springfield Ave. A standard monel rivet.

 Elevation: 190,461 ft.

STATE OF NEW JERSEY

DESCRIPTION OF SENCH MARKS

Essex County

ESS-A, Page 2

- Rv. 308 -NEWARK, ESSEX CO. On the south side of Springfield Ave,, on the southwest corner of its intersection with Pierce St. at the entrance to the 2 story brick house #12 Pierce St., on the north end of the top step; about 278.0 ft. south of the intersection of centerlines of Springfield Ave. and Pierce St., and about 30.0 ft. west of the centerline of Pierce St. A standard monel metal rivet.

 Elevation: 207.624 ft.
- Mon. 307 -NEWARK, Essex Co. On the south side of Springfield Ave., on the southwest corner of its intersection with 8. 19th St. about 30.0 ft. west of the west curb of 3 19th St., about 5.0 ft. west of Public Service pole #PS-14504-N; and 2.0 ft. south of south curb of Springfield Ave., flush with grade. A standard U.S.C.&G.S.&S.B. disk, set in concrete.

 Elevation: 202.440 ft.
- Av. 307 -IRVINGTON, ESSEX CO. On the south side of Springfield Ave. at the southeast corner of its intersection with Clinton Ave., at the Irvington National Bank, 11.50 ft. north of the north curb of Clinton Ave., about 55.0 ft. east of the intersection of the north curb of Clinton Ave. and south curb of Springfield Ave., on the northeast corner of the top step leading into said Bank, 5 inches east of west end and 4 inche south of north edge of top step. A standard monel rivet, Elevation: 151.715 ft.
- Rw. 306 -IRVINGTON, ESSEX CO. On the north side of Springfield ava at the 2 story brick building #1052; about 100 ft. west of the west curb of Smith St., on the water-table, 15.0 ft. east of southwest corner of most easterly part of building, 15.0 ft. north of north curb of Springfield Ave. 2 inches south of south wall of the bldg., and 6 inches above sidewalk level. A standard monel rivet.

 Elevation: 125.013 ft.
- Rw. 305 -IRVINGTON, ESSEX CO. On the north side of Springfield Ave. on NE corner of its intersection with Florence Ave., at the Florence Ave. School, at Springfield Ave. entrance, on the northwest corner of top stone step, 26 inches north of south edge of step, 4 inches east of the west end and 12 west of the square base of the west one of two columns. A standard monel rivet.

Elevation: 210.323 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County

ESS-A Page 3

- Mon. 305 MAPLEWOOD, ESSEX CO. On the south side of Springfield Ave. east of its junction with Chanceller Ave. about 300. It west of Lightning Brook, about 120. It. east of the intersection of the centerlines of Springfield and Chancellor Aves., 2.50 ft. south of south curb of Springfield Ave., in front of a Standard Oil Gas Station and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 191.487 ft.
- Mon. 304 MAPLEWOOD, ESSEX CO. On the north side of Springfield Ave. about north of the intersection of the centerlines of Springfield and Burnet Aves. and Tuscan Road, 1.67 ft. north of north curb of Springfield Ave.; 63.54 ft. southeast of the southeast corner of a 2 story brick bldg.; 72.69 ft. southwest of the southeast corner of the door of a 1 story brick garage, and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation 230.332 ft.
- Rv. 304 MAPLEWOOD, ESSEX CO. On the south side of Springfield Ave., on the southwest corner of its intersection with Wellesley St., in the entrance to store at \$1753 Springfield Ave., on the northwest corner of the bluestone door sill, 7 inches from the west end and 5 inches from the north edge thereof. A standard monel rivet.

 Elevation: 218.891 ft.
- Rv 303 MAPLEWOOD, ESSEX CO. On the south side of Springfield Ave. on the southeast corner of its intersection with Ohio St., in the entrance to a 2 story brick building at #1941

 Springfield Ave., in the west end of the bluestone door sill. A standard monel rivet.

 Elevation: 222,265 ft.
- Mon. 500 MILLBURN, ESSEX CO. On the south side of Millburn Ave., at its intersection with Ridgewood Ave., in the east end of the triangular traffic island thereat, about 29.70 ft. south of the centerline of Millburn Ave.; and about 18.0 ft. west of the centerline of Ridgewood Ave., and flush with grade.

 Elevation: 96.041 ft.
- Mon. 501 MILLBURN, ESSEX CO. On the south side of Millburn Ave., at its intersection with Walnut Ave., in the easterly corner of the triangular traffic island thereat, about 29.6 ft. south of the center line of Millburn Ave.; about 16.0 ft. northwest of the centerline of Walnut Ave., and flush with grade. A standard U.S.C.&G.B.&B. disk, set in concrete. (A U.S.C.&G.S. 2nd order B.M.)

 Elevation: 139.980 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCK MARKS

Essex Co. 1936

ESS-A Page 4

- Rw. 500 MILLBURN, ESSEX CO. On the northwest side of Wyoming Ave., on the northwest corner of its intersection with Glen Ave., at the bridge over the D.L.&W. RR at the northeast corner of the base of the northwest balustrade about 20.60 ft. northwest of the centerline of Wyoming Ave., and about 6 inches above sidewalk level. A standard monel rivet.

 Elevation: 154,123 ft.
- Rv. 501 MILLBURN, ESSEX CO. On the southeast side of Wyoming Ave., on the southeast corner of its intersection with Mt. Ave., in the top of a retaining well, about 47.0 ft. northeast of the centerline of Mountain Ave., about 35.0 ft. southeast of the centerline of Wyoming Ave. A standard monel rivet.

 Elevation: 273.075
- Mon. 653 -MAPLEWOOD, ESSEX CO. On the northeast corner of Wyoming Ave. and Clinton Ave. 37.76 ft. northeast of pole #60062-MD; 1.74 ft. southeast of a cross cut in top of curb of Wyoming ave. A standard U.S.C.&G.S.&S.S. bronze disk, stamped "653", set in concrete, flush with ground. Elevation: 284.928 ft.
- Mon. 654 -MAPLEWOOD, ESSEX CO. On the northwest corner of Wyoming Ave. and Sagamore Rd., 2.15 ft. northwest of a cross cut in curb of Wyoming Ave., 16.19 ft. northeast of a cross cut in side of street sign post. A standard U.S.C.&G.S. &S.S. disk, stamped "654" set in concrete, flush with ground. Elevation: 311.561 ft.
- Rv. 502 -MAPLEWOOD, ESSEX CO. On the northwest side of Wyoming Ave on the northeast corner of its intersection with Claremont Ave., in front of house #215 Wyoming Ave., about 36.50 ft. northwest of the centerline thereof; and on the southwest corner of the first step leading to said dwelling. A standard monel rivet.

 Elevation: 322.712 ft.
- Rv. 503 -MAPLEWOOD, ESSEX CO. On the northwest side of Wyoming Ave. at East Orange Water Works, about 21.0 ft. southwest of boundary line between South Orange and Maplewood, about 39.0 ft. northwest of centerline of Wyoming Ave., on the southwest end of the first step to said water works. A standard monel rivet.

 Elevation: 319.617 ft.
 - Rv. 549 -MILBURN, ESSEX CO. On Wyoming Ave., in the concrete step leading to house #398 Wyoming Ave. A standard monel metal rivet.

Elevation: 254.733 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex Co. 1936

ESS-A Page 5

Mon. 655 - SOUTH ORANGE, ESSEX CO. On the south side of South Orange Ave., about opposite the east curb line of Wyoming Ave., 10.0 ft. south of curb of S.Orange Ave., 7.58 ft. southeast of a cross cut on iron sign post. A standard U.S.C.&G.S.&S.S. disk, stemped "655", set in concrete, flush with the ground.

Elevation: 339.498 ft.

- Rv. 400 SOUTH ORANGE, ESSEX CO. On the south side of S. Orange Ave. at its intersection with Wyoming Ave., at the South Mountain School, about 150 ft. weat of the centerline of the portion of Wyoming Ave. which leads to West Orange; about 50 ft. south of centerline of S. Orange Ave., on top of the cheek piece of the steps leading to the main entrance to the school; 29.0 ft. south of the south curb of Wyoming Ave., 7 inches from the north edge and 7 inches from the east edge of the top of the cheek piece. A standard monel rivet.
 - Elewation: 339.957 ft.
- Mon. 657 SOUTH ORANGE, ESSEX CO. On the northwest side of Wyoming Ave., about 1100 ft. south of Luddington Road.
 1.15 ft. northwest of face of curb; 32.64 ft. southwest a fire hydrant. A standard U.S.C.&Q.S.AS.S. disk, set in concrete, stamped #657 and set flush with ground.
 Elevation: 341.372 ft.
- Mon. 658 WEST ORANGE, ESSEX CO. On the southeast corner of Wyoming Ave. and Luddington Road. 50.08 ft. west of the northwest corner of house #526; 4.87 ft. southeast of a cross cut on curb of Wyoming Ave. A standard U.S.C.&G.S. &S.B. disk, stamped "658" set in concrete, flush with ground.

 Elevation: 315.988 ft.
- Rv. 401 WEST ORANGE, ESSEX CO. On the south side of Wyoming Ave., on the southwest corner of its intersection with Luddington Road; in the concrete slab top of a pumping basin, about 15 ft. east of the South Orange-West Orange town line; 14.50 ft. west of the west curb of Luddington Rd.; 7.0 ft. south of south curb of Wyoming Ave. and 3.5 ft. west of east edge of the slab, flush with grade. A standard monel metal rivet.
- Rv. 550 SOUTH ORANGE, ESSEX CO. On the east side of Wyoming Ave. in front of house \$214 Wyoming Ave. About 95.0 ft. north of Highland Rd. and 12.0 ft. east of the east curb of Wyoming Ave. A standard monel metal rivet in the top of an Essex Co. Monument.

Elevation:

Elevation: 330.579 ft.

315.904 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MAPKS

Essex Co. 1936

ESS-A page 6

- 9v. 402 WEST ORANGE, ESSEX CO. On the north side of Gregory Ave., between Walker Road and Orange Heights Ave., at the Gregory School; 67.20 ft. north of the north curb of Gregory Ave., in the bottom step of the main entrance to the school; 0.35 ft. north of south edge and 0.60 ft. east of west edge of the step. A standard monel metal rivet.
 - Elevation: 329.763 ft.
- Rv. 403 WEST ORANGE, ESSEX CO. About 650. ft. north of north curb of Gregory Ave. in rear of Theodore Roosevelt High School; about 200 ft. east of east curb of Club Blvd., about 100 ft. south of south curb of Gilbert Place; on top of east and of step at entrance to store room of the school; 4.82 ft. west of west wall of school; 0.17 ft. west of east edge and 0.17 ft. north of south edge of step. A standard monel metal rivet. Elevation: 377.650 ft.
- Mon. 400 WEST ORANGE, ESSEX CO. On the northwest side of Gregory Ave. about 131 ft. south of south curb of Gregory Place, 1.0 ft. southeast of crowsfoot cut in fieldstone wall; 9.01 ft. south of south corner of 5th column from Gregory Place in the wall, and 0.17 ft. below grade. standard U.S.C.&G.S.&S.S. disk, stamped *400* set in concrete.

Elevation: 357.400 ft.

Mon. 401 - WEST ORANGE, ESSEX CO. On the southeast side of Gregory Ave., about 288 ft. north of north curb of Northfield Ave., 66.66 ft. northeast of pole #60936-WO; 57.03 ft. south of pole #60937-w0; and 0.17 ft. below grade. A standard U.S.C.&O.S.&S. disk, set in concrete.

Elevation: 377.158 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County

ESS-A page 7

RV. 404 - WEST ORANGE, ESSEX CO. On the west side of Gregory Ave. on the southwest corner of its intersection with Mt. Pleasant Ave., inside the pumping station building of the Commonwealth Water Co., in the concrete floor, 3.00 ft. west of the Gregory Ave. entrence, 3.40 ft. south of the south edge of the northerly pit, 1.25 ft. north of the north edge of the southerly pit. A standard monel rivet.

Elevation: 384.423 ft.

Mk 413384.00(Essex Co. Engineer)(Commonwealth Water Co.) WEST ORANGE?
ESSEX CO. On the west side of Gregory Ave., on the southwest corner of its intersection with Mt. Pleasant Ave.,
inside the pumping station building of the Commonwealth
Water Co., in the concrete floor, northwest of Rv. 404.
A chiseled cross.
Elevation: 384.402 ft.

- Mon. 600 WEST ORANGE, ESSEX CO. On the west side of Prospect Ave about 1000 ft. north of its intersection with Mt. Pleasant Ave., 91.54 ft. west of the southwest corner of the porch of house #470 Prospect Ave.; 92.58 ft. northwest of the southwest corner of the foundationof house #478 Prospect Ave., 16.60 ft. west of the west edge of the concrete pavement, 28.20 ft. south of the center bolt of a fire hydrant, and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation: 628.364 ft.
- Mon. 601 WEST ORANGE, ESSEX CO. On the east side of Prospect Ave. about 2000 ft. north of its intersection with Mt. Pleasant Ave., 72.74 ft. northwest of the northwest corner of the foundation of frame house #412 Prospect Ave. 47.04 ft. south of the center bolt of a fire hydrant; 24.46 ft. south of pole #PS-795-WO; 14.05 ft. east of the east edge of the concrete pavement, and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete Elevation: 599.517 ft.
- Rv. 600 WEST ORANGE, ESSEX CO. On the west side of Prospect Ave. at the Montclair Country Club, about 800 ft. south of the West Orange-Verona Town Line, about 127 ft. west of the centerline of Prospect Ave.; in the concrete base at the flagpole directly east of the main entrance to the club, 2.0 ft. east of the flagpole, 27.90 ft. east of the east curb of the club driveway, and flush with grade. A standard monel rivet.

 Elevation: 563.181 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County 1934

ESS-A. Page g

MON 602-VERONA, ESSEX COUNTY. On the west side of Mt. Prospect Avenue, about 1000 feet south of Sunset Avenue, in the property of the Montclair Country Club, 120.00 feet west of the southwest corner of the foundation of frame dwelling #101 Mt. Prospect Avenue, 6.44 feet west of the west ourb, 21.64 feet south of the center bolt of a fire hydrant, and level with the curb. A standard U.S.C.&G.S.& S.S. bronze disk set in concrete.

Elevation: 561.339 ft.

MON 603-VERONA, ESSEX COUNTY. On the north side of Mt. Prospect Avenue on the northeast corner of its intersection with Sunset Avenue, between the sidewalk and the curb, 70.97 feet north of the iron street sign post standing on the southeast corner, 3.53 feet from the curb of Sunset Avenue, 3.63 feet from the west edge of the Sunset Avenue sidewalk, and level with the curb. A standard U.S.C.&C.S.&S.S. bronze disk, set in concrete.

Elevation: 455.377 ft.

- MON 644-VERONA, ESSEX COUNTY. On the south side of Mt. Prospect Avenue, about 50 feet southwest of the southwest ourb of Bloomfield Avenue; 43.77 feet east of a nail in pole #PS-60184-VA; 47.85 feet west of a cross cut on an iron trolley pole; 10.72 feet south east of the south curb of Mt. Prospect Avenue and level with grade. A standard U.S.C. & G.S. & S.S. bronze disk, stamped *644* and set in concrete. Elevation: 474.041 ft.
- RV 504 VERONA, ESSEX COUNTY. On the west side of N. J. State
 Highway Route #23 (Pompton Turnpike), opposite its intersection with Cambridge Road, about 93 feet south of its
 intersection with Linden Avenue, at a gasoline service
 station of the Standard Oil Company of N. J., about 57.00
 feet west of the center line of Route #33, on top of the
 south end of a concrete island supporting three gasoline
 pumps near the east edge of the island, and about 6 inches
 above grade. A standard monel metal rivet.

 Elevation: 505,261 ft.
- MON 510-CEDAR GROVE, ESSEX COUNTY. On the west side of State Highway Route #23 (Pompton Turnpike or Avenue) about 129 feet south of its intersection with Harper Terrace, about 25 feet west of the center line of Route #23; 64.73 feet north of the center bolt of a fire hydrant, 84.78 feet northeast of the northeast corner of the foundation of a frame dwelling, 53.00 feet southeast of the southeast corner of the foundation of frame dwelling #120 Pompton Avenue, and level with the curb. A standard U.S.C. & G.S. & S.S. bronze disk, set in concrete.

 Elevation: 461.893 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County

ESS-A page 9

Mon. 511 - CEDAR GROVE, ESSEX CO. On the west side of Rte. 23, (Pompton Ave.) about 386 ft. south of its intersection with Mountain Ave., in front of the barns of the Pompton Ave. White Egg Farms at #224 Pompton Ave.; about 22. ft. west of the centerline of Pompton Ave.; 15.70 ft. south of the center bolt of a fire hydrant; 5.16 ft. northeast of a cross on the sidewalk, 5.01 ft. southwest of a cross on the sidewalk, and flush with grade. A standard U.S.C. &G.S.&S.S. disk.

Elevation: 466.077 ft.

- Rv. 505 CEDAR GROVE, ESSEX CO. On the west slab of Rte. 23, (Pompton Ave.) on the northwest corner of its intersection with Mountain Ave., about 47.0 ft. north of the centerline of Mountain Ave., about 36.0 ft. west of the centerline of Pompton Ave., at frome house #256 Pompton Ave., in the southwest corner of first step leading thereto. A standard monel rivet.

 Elevation: 450.384 ft.
- Av. 506 CEDAR GROVE, ESSEX CO. On the east side of Rte. #23, (Pompton Ave.) about 100. ft. south of the centerline of Love Lane and about 107.0 ft. east of the centerline of Rte. 23, at the Cedar Grove Town Hall, in the southeast corner of the third step of the staisway leading to its main entrance. A standard monel rivet.

 Elevation: 302.064 ft.
- Mon. 504 CEDAR GROVE, ESSEX CO. On the east side of Rte. 23, (Pompton Ave.) at the Cedar Grove #275 F&A.M. Lodge Bldg., about 12.0 ft. north of the entrance to said building, about 35.0 ft. east of the centerline of Pompton Ave. and flush with grade. A standard C.&G.S.&S.S. disk, set in concrete.

 Elevation: 263.699 ft.
- Rv. 507 CEDAR GROVE, ESSEX CO. On the west side of Rte. 23, (Pompton Ave.) about 150. ft. north of the centerline of Cedar Grove Pkway., about 76.0 ft. west of the centerline of Pompton Ave., on stairs leading from driveway on the north side to house at #756 Pompton Ave., on the southeast corner of the first step. A standard monel rivet. Elevation: 293.212 ft.
- Mon. 505 CEDAR GROVE, ESSEX CO. On the east side of Rte. 23, (Pompton Ave.) about 225 ft. south of its intersection with Fairview Ave., about 250. ft. north of the Gale Orchard House, about 25. ft. east of the centerline of Pompton Ave., and flush with grade. A standard U.S.C.& G.S.&S.3. disk, set in concrete.

 Elevation: 357.004 ft.

STATE OF NEW JERSEY

Passale County Essex County 1934

DESCRIPTION OF BENCH MARKS

ESS-A Page 10

- Rv. 508 CEDAR GROVE, ESSEX CO. On the west side of Rte. 23,
 (Pompton Ave.) about 1100. ft. south of its intersection
 with Mountain Ave., (Lindsley Road), at house #1174
 Pompton Ave., about 45 ft. west of the centerline of
 Pompton Ave., on the northwest corner of the first step
 of the second flight in the stairway leading to house
 #1174. A standard monel rivet.
 Elevation: 317.186 ft.
- Mon. 512 SINGAC, PASSAIC CO. On the east side of Rte. #23,
 (Pompton Ave.) about 450. ft. north of the Resex-Passaic
 Co. Line, 1.35 miles west of Little Falls Town Hall and
 21,500 ft. north of Bloomfield Ave, (Verona); about 155.0
 ft. south of Weaver St., about 21.85 ft. east of the centerline of Rte. 23; 1.80 ft. east of the east curb of Rte.
 23; 30.47 ft. southwest of the northwest corner and
 25.32 ft. west of the southwest corner of the porch of house 182 Pompton Ave. and flush with grade. A standard
 U.S.C.&G.S.&S.S. disk, set in concrete.
 Elevation: 176.171 ft.
- Rv. 509 SINGAC, PASSAIC CO. On the east side of Rte. 23, (Pompton Ave.) at the Essex-Passaic Co. line, about 2000 ft. north of Lindsley Road, (Mountain Ave.), about 40. ft. south of a frame dwelling across Pompton Ave. from the Singac Plumbing Supply Co. Bldg., and in the concrete base of a county line monument. A standard monel rivet.

 Elevation: 181.534 ft.
- Mon. 513 SINGAC, PASSAIC CO. On the west side of Rte. 23, about 1.1 miles west of Little Falls Town Hall, about 22,800 ft. north of Bloomfield Ave., (in Verona, Essex Co.) about 177. ft. south of Main St., about 21.6 ft. west of the centerline of Rte. 23, 19.08 ft. southeast of the southeast corner of the concrete balustrade foundation at the entrance to the Church of Cur Lady of Holy Angels, 17.5 ft. south of the projected centerline of the stairway leading to the Church, 28.40 ft. from the northeast corner of the west neadwall of a storm drain culvert, 1.53 ft. west of the west curb of Pompton Ave., and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 171.387 ft.
- Rv. 510 SINGAC, PASSAIC CO. On the east side of Rte. 23, (Pompton Ave.,) about 750. ft. north of Main St., and about 27.0 ft. east of the centerline of Pompton Ave., at the southeast end of the Highway Bridge over the Passaic River, on top of the easterly balustrade and about 4.0 ft. higher than the sidewalk. A standard monel rivet.

 Elevation: 174.795 ft.

STATE OF NEW JERSEY

Passaig Co.

ESS-A Page 11

- DESCRIPTION OF BENCH MARKS
- Rv. 511 WAYNE TWP., PASSAIC CO. On the north side of Rte. #6, (Pellington Blvd.) about 1500. ft. east of Rte. #23, about 21.0 ft. north of the centerline of Route #6, and at a culvert on the northerly headwall, on top of the northeast corner. A standard monel metal rivet. Elevation: 167.681 ft.
- Mon. 506 BORO. OF TOTOWA, PASSAIC CO. On the north side of Rts.6, {Pellington Blvd.} about 57.0 ft. east of center line of Nacht Punkt Road, about 37.0 ft. north of centerline of Rts. #6, about 10.0 ft. east of east bank of a brook and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete, stamped #506.

 Elevation: 182.211 ft.
- Mon. 507 BOHO. OF TOTOWA, PASSAIC CO. On the south side of Rte. 6 (Pellington Blvd.) about 800. ft. west of its intersection with Union Ave., about 41.60 ft. south of the center line of Route #6 and flush withgrade. A standard B.S.C.& G.S.&S.S. disk, set in concrete.

 Elevation: 200.226 ft.
- W-12 -LITTLE FALLS, PASSAIC CO. On the D.L.&W. RR about 140 ft west of the station, at semaphore signal 183, and 7 ft. south of the south rail, in the north face of the easterly padestal of the concrete overhead highway crossing, 4 ft. higher than the ground. A standard disk, stamped 12 1933 and set vertically. A first order B.M. Elevation: 59.495 meters-195.193ft.

TIE RUN IN MILLBURN, ESSEX CO. N.J. TO N.J.G.S. BENCH MARKS

- MK 3705- MILLBURN, Essex Co. N.J. A cross cut in the south end (six inches from the outer edge) of the door sill of the Main St. entrance to the banking department of the First National Bank Building.

 Elevation: 131.879 ft.
- MK 3704- MILLBURN, ESSEX CO. N.J. A cross cut in the east end of the coping of the north parapet of the arch bridge which carriesHilburn ave. over Rahway River., in Milburn. Elevation: 133.745 ft.

STATE OF NEW JERSEY

Essex County

DESCRIPTION OF BENCH MARKS

ESS-B, Page 1

STARTING AT NEWARK, N.J. AT MILITARY PARK, THENCE WEST TO THE ESSEX CO. COURT HOUSE AT THE INTERSECTION OF HIGH ST. AND SPRINGFIELD AVE. AND RUNNING NORTH ON HIGH ST. TO BLOOMFIELD AVE., THENCE WEST ON BLOOMFIELD AVE. THROUGH NEWARK, BLOOMFIELD, GLEN RIDGE, AND MONTCLAIR TO MT. PROSPECT AVE. (POMPTON TURNPIKE-RTE 23) IN VERONA, ESSEX CO.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL, BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. CDAST AND GEODETIC SURVEY.

- U-11 NEWARK, N.J. In Military Park, between Broad St., Park Pl. and Center St., about 100 ft. north of the centerline of Cedar St., 30° east of east curb of Broad St.; 42. north of a brass cannon, and in the top of the retaining wall of the subway entrance to the Men's room, 2.5 ft. higher than the east curb of Broad St. A standard disk, (1st order B.M.) Elevation: 12.487 meters, or 40.965 ft.
- 68.07(NJGS)-37 (City of Newark), NEWARK, ESSEX CO. At the High St. entrance to the Co. Court House, at the north one of the two columns, and on the top of the northeast corner of the square marble base. A chiseled cross, (A lst order B.M.).

 Elevation: 20.852 meters, 68.412 ft.
- Rv. 607 NEWARK, ESSEX CO. On the northeast corner of High St. and Central Ave., at St. Michael's Hospital, on the south end of the first step of the High St. entrance nearest Central Ave. A standard monel rivet.

 Elevation: 60.078 ft.
- Rv. 405 NEWARK, ESSEX CO. On the north side of Bloomfield Ave., on the northwest corner of its intersection with Crittenden St., across Bloomfield Ave. from the intersection of Park Ave. and High St., at the N.J. Bell Tel. Co. Bldg., at the Bloomfield Ave. entrance, 16. ft. east of the east curb of Bloomfield Ave., on the stone doorsill, 0.42 ft. west of the east check wall, 0.42 ft. north of south edge of sill, and 3. above sidewalk. A standard monel rivet.

 Elevation: 75.604 ft.
- Mon. 607 NEWARK, ESSEX CO. On the south side of Bloomfield Ave., on the southwest corner of its intersection with 13th St., about 10. ft. south of south curb of Bloomfield Ave., and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete Elevation: 102,997 ft.
- 17.61 (NJGS)-42 (City of Newark), NEWARK, ESSEX CO. At the Bloomfield Ave. concrete bridge over a driveway and atream in Branch Brook Park, and at the middle of the south parapet of the bridge. The apex of a pointed concrete post.

 Elevation: 117.939 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County 1934

EBS-B Page 2

- RV 606-BLOOMFIELD, ESSEX CO. On the north side of Bloomfield Ave., in the Erie RR freight yard, across Bloomfield Ave. from its intersection with Ampere Parkway, in the concrete base of a power line tower located at the southeast end of the over-head crane track, 143.0 ft. east of the southeast corner of the freight house and 30. ft. north of the north curb of Bloomfield Ave. A standard monel rivet.

 Elevation: 107.219 ft.
- Mon.606-BLOOMFIRLD, Essex Co. On the south side of Bloomfield Ave., on the southeast corner of its intersection with Watsessing Ave., about 50. ft. east of the east curb of Watsessing Ave. and about 10. ft. south of south curb of Bloomfield Ave. level with sidewalk. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 142.263 ft.
- Rv. 605-BLOOMFIELD, ESSEX CO. On the north side of Bloomfield Ave. on the northwest corner of its intersection with Broad St. at the Bloomfield Bank & Trust Co. Bldg., 21.60 ft. north of the north curb of Bloomfield Ave. 31.70 ft. west of the west curb of Broad St; if extended, and the west end of the stone step at main entrance. A standard monel rivet.

 Elevation: 127.965 ft.
- Mon. 605-GLEN RIDGE, ESSEX CO. On the southwest side of Bloomfield Ave. on southwest corner of its intersection with Ridgewood Ave. 2.10 ft. southwest of southwest edge of concrete sidewalk on southwest side of Bloomfield Ave.; 11.97 ft. northwest of northwest corner of base of traffic signal; and 44.19 ft. northeast of northeast corner of a sandstone slab on top of parapet wall paralleling Ridgewood Ave. A standard U.S.C.&G.S.&S.S. diak, set in concrete.

 Elevation: 186.559 ft.
- Mon. 604-GLEN RIDGE, ESSEX CO. On southwest side of Bloomfield Ave. on the southwest corner of its intersection with Parkway, 173. ft. northwest of intersection of SW line of Bloomfield Ave. and the NW line of Parkway; 11.45 ft. southwest of the southwest curb of Bloomfield Ave.; 47.44 ft. northwest of the corner of baseboard on NW corner of house #922; and 67.18 ft. southeast of nail in pole #PS-545-GR. A standard U.S.C. &G.S.&S.S. disk, set in concrete.

 Elevation: 229.490 ft.
- RV 604-MONTCLAIR, ESSEX CO. On north side of Bloomfield Ave. about 400. ft. east of Maple Ave. and about 400. ft. west of Glen Ridge-Montclair boundary line, at the bridge over the D.L.& W RR at the east end of and on top of a concrete shoulder extending inside the parapet wall on bridge, directly above the east pier, and about 2. ft. above the north curb of Bloomfield Ave. A standard monel rivet.

 Elevation: 240.923 ft.

Breek County 1934

#65-B, Page 3

RV 603- MONTCLAIR, ESSEX COUNTY. On the south side of Bloomfield Avenue on the southeast corner of its intersection with Seymour Street, at the Montclair Post Office, at the Bloomfield Avenue entrance thereto, on the east end of the lowest step leading to the terrare, 17.30 feet south of the south ourb of Bloomfield Avenue, 13.00 feet east of the center line of the center door, and about 8 inches above the curb. A standard monel metal rivet.

Elevation: 275.693 ft.

483.715 ft.

- RV 602 MONTCLAIR, ESSEX COUNTY. On the south side of Bloomfield Avenue, on the southeast corner of its intersection with Bouth Montain Avenue, at the Montclair Art Museum in the marble floor of the porch facing South Mountain Avenue, 0.8 feet from the east wall and 9.05 feet from the north wall of said porch. A standard monel metal rivet.

 Elevation: 373.467 ft.
- RV 601 MONTOLAIR, ESSEX COUNTY. On the south side of Bloomfield Avenue on the southeast corner of its intersection with Rockledge Road, at an apartment house at #838 Bloomfield Avenue, on the top of the northwest corner pier of the retaining wall, 15.50 feet south of the acuth curb of Bloomfield Avenue, 15.80 feet saat of the east curb of Rockledge Road, and 4.00 feet above the curb. A standard monel metal rivet.

Elevation:

- MON 644 VERONA, ESSEX COUNTY. On the south side of Mt. Prospect Avenue, about 50 feet southwest of the southwest curb of Bloomfield Avenue; 43.77 feet east of a nail in pole #PS-60184-VA; 47.85 feet west of a cross cut on an iron trolley noie; 10.72 feet south east of the south ourb of Mt. Prospect Avenue and level with grade. A standard U.S.C.&G.S.&S.S. bronze diek, stamped "844" and set in concrete.

 Elevation: 474.041 ft.
- MON 603 VERONA, ESSEX COUNTY. On the north side of Mt. Prospect Avenue on the north-east corner of its intersection with Sunset Avenue, between the sidewalk and the curb, 70.97 feet north of the iron street eign nost standing on the southeast corner, 3.53 feet from the curb of Sunset Avenue, 3.63 feet from the west edge of the Sunset Avenue sidewalk, and level with the curb. A standard U.S.C.&G.S.&B.S. bronze disk, set in concrete.

Elevation: 455.377 ft.

Essex County 1935

ESS-8 Page 4

TIE BUN IN MONTCLAIR TO N.J. GEOLOGICAL BENCH MARKS

- MK 453 MONTGLAIR, ESSEX CO. N.J. On the outer corner at the southeast end of granite door sill of the main entrance on Bloomfield Ave. to the D.L.&W. RR Station.

 Elevation: 244,432 ft.
- MK 454 MONTCLAIR, ESSEX CO. N.J. A cross cut in the extreme west end of the stone door sill (five inches from a pilaster and near the junction of the west stone balustrade with the building) at the Bloomfield Ave. entrance to the telephone building, which is on the southwest corner of Bloomfield and Gates Aves.

 Elevation: 250.903 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

STATE OF NEW JERSEY
DESCRIPTION OF BENCH MARKS

1934 ESS-C Page 1

Essex County

STARTING IN NEWARK, N.J. AT #533 MT. PROSPECT AVE., ABOUT 165 FT. NORTH OF BALLANTINE PARKWAY AND RUNNING NORTH ON MT. PROSPECT AVE. TO THE BELLEVILLE TOWN LINE, THENCE NORTH ON QUARRY ST. TO BELLEVILLE AVE., THENCE WEST ON BELLEVILLE AVE. THROUGH BELLEVILLE, BLOOMFIRLD AND GLEN RIDGE TO RIDGEWOOD AVE., THEN SOUTH TO BLOOMFIELD AVE.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- Mon. 610 NEWARK, EBBEX CO. On the east side of Mt. Prospect Ave., about 165. ft. north of the northeast corner of its intersection with Ballantine Parkway, 165. ft. north of the north curb line (if extended) of the Parkway, in front of house #533 Mt. Prospect Ave., 2.76 ft. east of the east ourb of Mt. Prospect Ave., 16.73 ft. northwest of the northwest corner of the north wall of the steps to the house, 52.05 ft. southwest of the southwest corner of wall of steps to house #535 Mt. Prospect Ave., and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete.
- Rv. 626 NEWARK, ESSEX CO. On the east side of Mt. Prospect Ave., on the northeast corner of its intersection with Grafton Ave., at St. Pauls' Methodist Church, on top of the south cheek-walk of the steps to the Mt. Prospect Ave. entrance to the Church; 13.50 ft. east of east curb of Mt. Prospect Ave., 29.7 ft. north of north curb of Grafton Ave.; 9.7 ft. south of centerline of the door, and 2.0 ft. above the curb. A standard monel rivet.

 Elevation: 106.603 ft.
- Mon. 611 NEWARK, ESSEX CO. On the east side of Mt. Prospect Ave., on the northeast corner of its intersection with Heller Parkway; 18.29 ft. north of the north curb of Heller Parkway; 3.52 ft. east of the east curb of Mt. Prospect Ave., 25.64 ft. southwest of the southwest corner of the south wall at the steps leading to house \$685 Prospect Ave.; and flush with the grade. A standard U.S.C.&G.S.&B.S. disk, set in concrete.

 Elevation: 100.979 ft.
- Rv. 627 NEWARK, ESSEX CO. On the east side of Mt. Prospect Ave., about 150. ft. south of Verona Ave., at the building of the Woodside Building and Loan Ass'n., (#857 Mt. Prospect Ave.); on the southwest corner of the square base of the most southerly of four columns on the Mt. Prospect Ave. side, and about 3.0 ft. above the curb. A standard monel rivet.

 Elevation: 87.450 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County
1934

ESS-C Page 2

- Mon. 1250 NEWARK, ESSEX CO. On the east side of Mt. Prospect Ave., on the northeast corner of itsintersection with Verona Ave., 17.10 ft. northeast of the north curb of Verona Ave., 7.52 ft. southeast of the east curb of Mt. Prospect Ave., and 12.36 ft. northwest of the southwest corner of the 3 story brick building of Heller Bros Co. A standard U.S.C.&G.3.&S.S. disk, set flush in the concrete sidewalk.

 Elevation: 82.902 ft.
- Mon. 1251 NEWARK, ESSEX CO. On the south side of Verona Ave., 346.35 ft. southeast of the east curb of Summer Ave.; 10.10 ft. southwest of southwest curb of Verona Ave.; 16.40 ft. northwest of northwest corner of 3 story brick building #144 Verona Ave.; 14.95 ft. northeast of the front of a 2 story frame building #145-50 Verona Ave., and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation: 69.539 ft.
- Mon. 1252 NEWARK, ESSEX CO. On the west side of Riverside Ave.,

 (S.H. Rte. 21), on the southwest corner of its intersection with Verona Ave. 13.10 ft. south of the south curb of Verona Ave.; 10.45 ft. southwest of Telephone Pole #69857; and 13.50 ft. west of the west curb of Riverside Ave., and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation: 12.440 ft.
- Mon. 1253 BELLEVILLE, ESSEX CO. On the west side of Main St., (S.H. Rte. #21), on the southwest corner of its intersection with Mill St., 16.35 ft. south of the end of the south curb of Mill St.; 6.26 ft. northwest of the northwest corner of a catch basin located in the west curb of Main St.; and 11.34 ft. southeast of the corner of the fence located on said corner, and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete.
- Mon. 1254 BELLEVILLE, ESSEX CO. On the east side of Main St. (S.H. Rte. 21), south of the Belleville Turnpike bridge over the Passaic River, 185. ft. southwest of the south curb of William St., projected; 19.30 ft. east of the east curb of Main St.; 127.70 ft. northeast of the north face of P.B. Service pole #2251-B, and 0.50 ft. above the curb. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

Elevation: 8.655 ft.

Essex County 1934

STATE OF NEW JERSEY

ESS-C, Page 3

DESCRIPTION OF BENCH MARKS

- BELLEVILLE. At Belleville, Essex County, about 150 feet southwest of the concrete balance weight of a drawbridge, 33 feet southeast of the main entrance to the Dutch Reformed Church, 16 feet west of the west curb of Main Street, and 6 inches higher than the sidewalk. A standard disk, stamped "BELLEVILLE 1933" and set in the top of a concrete post. (A 1st order B.M.)

 Elevation: 3.481 meters or 11.421 feet.
- RV 628-BELLEVILLE, ESSEX COUNTY. On the south side of Belleville
 Ave., at the southwest corner at its intersection with Union
 Avenue, at a gasoline service station of The Atlantic Refining
 Co., about 38.00 ft. south of the south curb of Belleville Ave.
 and about 48.00 ft. west of the west curb of Union Ave., on the
 top of the east end of a concrete island supporting two gasoline pumps, about 6 inches above grade. A standard monel rivet
 Elevation: 87.267 ft.
- RV 630-BELLEVILLE, ESSEX COUNTY, N.J. On the south side of Belleville Avenue, at Public School No. 10 opposite intersection of Franklin Avenue, 61.00 ft. south of the south curb of Belleville Avenue, 7.00 ft. west of the center line of door at Belleville Avenue entrance and 3 inches away from the building on the west end of concrete platform. A monel rivet.

 Elevation: 114.391 ft.
- MON. 612-BELLEVILLE, ESSEX COUNTY. On the northeast side of Belleville Avenue, on the northeast corner of its intersection with Franklin Avenue, 9.31 ft. northeast of a cross in the curved curb at the corner, 9.98 ft. southeast of a similar cross, 86.04 ft. north of Pole No. BT 741 BV; 57.75 feet southwest of Pole No. BT 742 BV, and level with the curb. A standard U.S.C.& G.S.&S.S. bronze disk set in concrete.

 Elevation: 107.243 ft.
- MON. 613-BELLEVILLE, ESSEX COUNTY. On the north side of Belleville Ave., on the northeastcorner of its intersection with Stevens Road, 7.00 ft. north of the north curb of Belleville Ave., 65.00 ft. east of the east curb of Stevens Rd., 10.00 ft. east of the east line of dwelling No. 676 Belleville Ave., and flush with grade. A standard U.S.C.&G.S.&S.S. bronze disk set in concrete, stamped "613"

 Elevation: 122.075 ft.
- RV 631-BLOOMFIELD, ESSEX COUNTY. On the north side of Belleville Ave., on the northeast corner of its intersection with Davey St., at a gasoline service station of the Standard Oil Co. of N.J., about 58 ft. north of the north curb of Belleville Ave., about 70.5 ft. from the east curb of Davey St. projected, in the top of the concrete curb at the southeast corner of the service station office building, and about 8 inches above the sidewalk. A standard monel rivet.

 Elevation: 125.873 ft.

STATE OF NEW JERSEY

Essex County 1934

ESS-C, Page 4

DESCRIPTION OF BENCH MARKS

- RV 632-BLOOMFIELD, ESSEX COUNTY, N.J. On the south side of Belleville Ave. on the southeast corner of its intersection with Williamson Ave., at a brick apartment house (No. 200 Belleville Ave.); 2.40 ft. east of the center line of the Belleville Ave. entrance, in the east end of the stone door sill; about 46.9 ft. east of the east curb of Williamson Ave., about 10.7 ft. south of the south curb of Belleville Ave., and 14 inches above the curb. A standard monel rivet. Elevation: 138.624 ft.
- RV 633-BLOOMFIELD, ESSEX COUNTY, N.J. On the south side of Belleville Ave. on the southwest corner of its intersection with Broad St., at the Bloomfield High School, at the main Broad St. entrance thereto; on top of the north end of the third step from sidewalk level of the flight leading to the entrance; 74.40 ft. west of the west curb of Broad St. and about 2.50 ft. above the curb. A standard monel rivet. Elevation: 140.352 ft.
- MON 605-GLEN RIDGE, ESSEX COUNTY, N.J. On the southwest side of Bloomfield Ave., on the southwest corner of its intersection with Ridgewood Ave., 2.10 ft. southwest of the southwest edge of the concrete sidewalk on southwest side of Bloomfield Ave., 11.97 ft. northwest from the northwest corner of the base of a traffic signal light, and 44.19 ft. northeast of the northeast corner of the bottom of a sandstone slab on top of a parapet wall paralleling Ridgewood Ave. A standard U.S.C.&G.S &S.S. bronze disk set in concrete. Elevation: 186.559 ft.

fie RUN IN BLOOMFIELD TO N.J.G.S. BENCH MARKS

MK 455 - A cross cut in the extreme northwest corner of a large flat stone in the north end of the east abutment, upon which rests the east end of the north truss of the iron bridge which carries the Greenwood Lake Branch of the Erie Railroad over the Morris Canal.

Elevation: 133.084 ft.

MK 456 - BLOOMFIELD, ESSEX CO. This bench mark is the top of a round knob cut in the southeast corner of a brownstone monument standing in front of Christ Episcopal Church, at the junction of Bloomfield Ave. and Liberty St. Elevation: 150.783 ft.

Essex County 1934

ESS-D Page 1

BEGINNING AT BELLEVILLE, ESSEX CO. AND THENCE EAST ON THE BELLE-VILLE TURNPIKE TO FRANKLIN AVE: THENCE NORTHEAST ON FRANKLIN AVE THROUGH NUTLEY TO KINGSLAND ROAD THENCE NORTHWEST ON KINGSLAND RD. TO CATHEDRAL AVE. (PASSAIC AVE.) THENCE NORTH ON PASSAIC TO VAN HOUTEN AVE., THENCE WEST ON VAN HOUTEN AVE TO VALLEY ROAD, CLIFTON; THENCE NORTH ON VALLEY ROAD INTO PATERSON, PASSAIC CO. N.J.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL, BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- X 11 BELLEVILLE, ESSEX CO. About 300 ft. south of the Cleveland Station of the Erie RR, about 301 ft. south of Mills St., about 250 ft. east of Broadway, 24 ft. west of the northeast corner of the Essex Wire Cloth Mfg. Co Bldg., and in the top of the southwest corner of the concrete abutment of the steel railroad bridge over Mills St. A standard disk, stamped "X 11 1933". (A lst order B.M.)

 Elevation: 5.408 meters or 17.743 ft.
- BELLEVILLE BELLEVILLE, ESSEX CO. About 150. ft. southwest of the concrete balance weight of a drawbridge, 33 ft. southeast of the main entrance to the Dutch Reformed Church, 16 ft. west of the west curb of Main St., and 6 inches higher than the sidewalk. A standard disk, stamped "Belleville 1933", set in concrete post. (lst order B.M.).

 Elevation: 3.481 meters or 11.421 ft.
- RV 12 NORTH ARLINGTON, BERGEN CO. At the junction of Arlington Blvd. and River Road, about 3500 ft. north of the Belleville Ave. bridge over the Passaic River, at the high water mark on the east bank of the river, 75 ft. east of the low water mark, on the south side of the Blvd. at a concrete culvert, in the top of the west headwall and 2 ft. south of the north end. A standard monel rivet. (let order B.M.)

 Elevation: 2.378 meters or 7.802 ft.
- MK 629 BELLEVILLE, ESBEX CO. On the east side of Washington Ave. at the Belleville Town Hall, about 100 ft. north of Belleville Ave. at the Statue of Victory, in front of the left foot of the statue. The top of a bronze bolt.

 Elevation: 143.502 ft.
- RV 628 BELLEVILLE, ESSEX CO. On the south side of Belleville Ave at the southwest corner of its intersection with Union Ave. at a gas station of the Atlantic Refining Co., about 38. ft. south of the south curb of Belleville Ave. and about 48. ft. west of west curb of Union Ave. on the top of east end of a concrete island supporting two gas pumps, about 6" above grade. A standard monel rivet.

Elevation: 87.287 ft.

Essex County 1934

E88-D. Page Z

- RV 630 BELLEVILLE, ESSEX COUNTY. On the south side of Belleville
 Avenue, at Public School No.10 opposite intersection of
 Franklin Avenue, 61.00 feet south of the south curb of
 Belleville Avenue, 7.00 feet west of the center line of door
 at Belleville Avenue entrance and 3 inches away from the
 building on the west end of concrete platform. A monel metal
 rivet.

 Elevation: 114.391 ft.
- MON 612-BELLEVILLE, ESSEX COUNTY. On the northeast side of Belleville Avenue, on the northeast corner of its intersection with Franklin Avenue, 9.31 feet northeast of a cross in the curved curb at the corner, 9.98 feet southeast of a similar cross, 86.04 feet north of Pole #BT-741-BV; 57.75 feet southwest of Pole #BT-742-BV; and level with the curb. A standard U.S.C.&G.S.&S.S. bronze disk, set in concrete, stamped #612*.

 Elevation: 107.243 ft.
- MON 630-BELLEVILLE, ESSEX COUNTY. About 200 feet east of Franklin Avenue, about 1200 feet north of Belleville Avenue, on Hendricks Field Golf Course about 15 feet west of the west edge of the 18th green, 170 feet east of the east bank of a creek; 52.62 feet northeast of a 12-inch maple tree; and 0.3 feet below grade. A standard U.S.C. & G.S. & S.S. bronze disk stamped "630", set in concrete.

 Elevation: 100.669 ft.
- RV 634 BELLEVILLE, ESSEX COUNTY. On the west side of Franklin Avenue, in the northeast corner of the property of Scho Isolation Hospital, about 165 feet south of the south curb of Berkeley Avenue, in the center of the north end of the concrete top of an underground valve chamber, 11.84 feet northwest of the north end of a catch basin in the west curb of Franklin Avenue, 66.87 feet southwest of the southwest corner of the foundation of frame dwelling #284 Franklin Avenue, level with grade. A standard monel metal rivet.

 Elevation: 108.270 ft.
- RV 835-BELLEVILLE, ESSEX COUNTY. On the west side of Franklin
 Avenue, west of the end of Chestnut Street, about 275 feet
 west of the west curb of Franklin Avenue, in the southeast
 corner of the concrete wall around the Municipal Swimming
 Pool, on the northeast shore of "Camp Carrigan Pond", about
 75 feet south of the retaining wall around a storm sewer
 outlet, 8 inches west of the east edge of the wall of the
 pool; about 1 ft. above grade. A standard monel metal rivet.
 Elevation: 74.252 ft.

Essex Sounty

E65-D, Page 3

- RV 636 NUTLEY, ESSEX COUNTY. About 145 feet east of the east curb, of Franklin Avenue, on the south side of Harrison Street, in the west end of the retaining wall at the Harrison Street bridge over a brook, 1.30 feet from the west end of the wall, 8.20 feet south of the south curb of Harrison Street, about 4 inches above grade. A standard monel metal rivet.

 Elevation: 63.833 ft.
- MK 645 NUTLEY, ESSEX COUNTY. On the east side of Franklin Avenue, directly opposite the main entrance to Nutley High School, about 295 feet north of the center line of Booth Drive, about 36 feet east of the center line of Franklin Avenue, on top of the northeast corner of the level portion of the south balustrade at the steps leading down to Nutley High School Stadium. A chiseled square.

 Elevation: 80.193 ft.
- MON 614-NUTLEY, ESSEX COUNTY. On the east side of Franklin Avenue, on the southeast corner of its intersection with William St. in front of a Standard Gras Station, 14.00 feet northeast of the northeast curb of William St., 8.40 feet southeast of the southeast our of Franklin Avenue, 47.65 feet south of steel pole PSCT-507, and flush with the sidewalk. A standard U.S.C.&G.S.&S.S. bronze disk stamped "614", set in concrete.

 Elevation: 86.486 ft.
- MON 615-NUTLEY, ESSEX COUNTY. On the northwest side of Franklin Avenue, about 0.5 miles northeast of its intersection with Center Street, about 475.0 feet southwest of its intersection with Vreeland Avenue, near the southwest property line of the frame dwelling at #441 Franklin Avenue; 7.77 feet northwest of the northwest curb of Franklin Avenue; 27.90 feet north of the top center nut of a fire hydrant, 11.17 feet southwest of steel pole #PSCT-552 A, and 0.20 feet below sidewalk level. A standard U.S.C. & G.S. & S.S. bronze disk, stamped "615", and set in concrete.

 Elevation: 91.012 ft.
- RV 637 NUTLEY, ESSEX COUNTY. On Franklin Avenue at the northwest corner of its intersection with St. Paul's Place, at St. Paul's Congreational Church, at the doorway to basement and Sunday School rooms, 36.3 feet west of the west curb of Franklin Avenue, 62.4 feet north of the north curb of St. Paul's Place (if extended), 57.7 feet south of the northeast corner of the church, 8.8 feet east of the north corner of the stone jamb of the basement door. A standard monel metal rivet.

 Elevation: 63.722 ft.
- RV 638 NUTLEY, ESSEX COUNTY. On the south side of Kingsland Road about 160 feet west of the west curb of Cathedral Avenue (if extended) about 48.5 feet south of the south curb of Kingsland Road, at the main entrance to George Lamonte & Sons factory, near the east edge of the concrete and flagstone platform, 5.22 feet north of the north wall of the factory, A standard monel metal rivet.

 Elevation: 112.255 ft.

Passaic County 1934

ESS-D Page 4

- Rv. 639 CLIFTON, PASSAIC COUNTY. On Passaic Ave., at the southwest corner of its intersection with Allwood Ave., in the top of the north end of the concrete platform in front of the office of the Ridgelawn Service Station, 13.28 ft. south of the north edge of the south sidewalk of Allwood Ave., 48.4 ft. west of the east edge of the west sidewalk of Passaic Ave., 1.58 ft. southwest of the northeast corner of the Service Sta. Office Bldg., 0.42 ft. south of north edge of platform, 6 inches above grade. A standard monel rivet. Elevation: 140.686 ft.
- Mon. 616 CLIFTON, PASSAIC COUNTY. On the west side of Passaic Ave. on the southwest corner of its intersection with Cresthill Ave., 10.0 ft. southwest of the southwest curb of Cresthill Ave., 1.55 ft. southeast of the edge of the sidewalk, 26.21 ft. south of a fire hydrant and 5.11 ft. southwest of a tack in pole #PS-1335-C. A standard U.S.C.&G.S.&S.S. disk, set in concrete, flush with the sidewalk.

 Elevation: 135.547 ft.
- Mon. 617 PASSAIC, PASSAIC COUNTY. On the east side of Passaic Ave., on the northeast corner of its intersection with South Park way, about 100.0 ft. northeast of Bouth Parkway, 2.51 ft. southeast of the southeast curb of Passaic Ave., 5.08 ft. southwest of an 18 inch maple tree, 44.40 ft. east of pole #61748-C, and level with the curb. A standard U.S.C.&G.S. &S.S. disk, set in concrete.

 Elevation: 110.054 ft.
- Rv. 640 PASSAIC, PASSAIC COUNTY. On the southeast side of Passaic Ave., west of its intersection with Van Houten Ave., at the D.L. & W. RR Station, in the hand rail of the stairs leading to the west platform, at the apex of the second concrete post from the bottom; 8.56 ft. from the west retaining wall of the railroad embankment, 23.0 ft. southeast of the southeast curb of Passaic Ave. and about 10 ft. above the curb. A standard monel rivet.

 Elevation: 83,440 ft.
- Mon. 631 PASSAIC, PASSAIC COUNTY. On the northwest side of Passaic Ave., at the D.L.AW. RR Station, on the concrete walkway of the concrete bridge over the intersection of Passaic and Van Houten Aves., about 137.50 ft. north of the north end of the station platform, 0.52 ft. northeast of the west edge of the walkway; 1.22 ft. west of the concrete railing; and 85.90 ft. north of the west corner of the nearest railing post to the south and level with the walkway. A standard U.S.C.&G.S.&S. & disk, set in concrete, set in lead.

 Elevation: 91.084 ft.

STATE OF NEW JERSEY

ESS-D Page 5

Passale County

1934

DESCRIPTION OF BENCH MARKS

Rv. 641 - PASSAIC, PASSAIC COUNTY. On Van Houten Ave. on the north west corner of its intersection with Willet St., in the first Window-sill west of the southeast corner of a factor belonging to the Manhattan Rubber Co., 3.98 feet west of the southeast corner of the building, 12.33 ft. north of the north curb of Van Houten Ave., 19.40 ft. west of the west curb of Willet St. and 3.0 ft. above the curb. A standard monel rivet.

Elevation: 118.240 ft.

Mon. 618 - CLIFTON, PASSAIC COUNTY. On the northeast side of Van Houten Ave., oppositethe center line of Wonham Road and level with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

Elevation: 134.335 ft.

- Mon. 619 CLIFTON, PASSAIC COUNTY. On the southwest side of Van Houten Ave., on the southwest corner of its intersection with Campbell Ave., 1.34 ft. southwest of the southwest curb of Van Houten Ave. and level with the curb. A standard U.S.C.&C.S.&S.S. disk, set in concrete. Elevation: 129.923 ft.
- Rv. 642 ~ CLIFTON, PASSAIC COUNTY. On the northeast side of Van Houten Ave., at the Eric Railroad Crossing on top of the southwest corner of the concrete base of an automatic signal relay box, 26.82 ft. northeast of the northeast curb of Van Houten Ave., 59.32 ft. north of a highway-crossing warning signal post, 7.75 ft. east of the centerline of the east rail of the track, and about 2.0 ft. above the track. A standard monel rivet.

 Elevation: 130.636 ft.
- Rv. 643 CLIFTON, PASSAIC COUNTY. On Van Houten Ave. on the north west corner of its intersection with Broad St., at a fire house, in the concrete foundation, 3 inches southeast of the northwest corner of the building, 24.35 ft. north of the northeast edge of the concrete pavent on Van Houten Ave., 49.9 ft. northwest of the northwest curb of Broad Street and level with grade. A standard monel rivet.

 Elevation: 179.160 ft.
- Mon, 620 CLIFTON, PASSAIC COUNTY. On the southwest side of Van Houten Ave. between Valley Road and Grove St., on front of the gardens of a nursery, about 1900.0 ft. southeast of Valley Road, about 4.75 ft. southwest of the edge of the pavement and level with grade. A standard U.S.C.& G.S.&S.S. disk, set in concrete.

 Elevation: 282.130 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

Passaic County 1934

DESCRIPTION OF BENCH MARKS

ESS-D Page 6

- MON. 621-CLIFTON, PASSAIC COUNTY. On the north east side of Van Houten Avenue, on the north east corner of its intersection with Valley Road, about 1.71 feet east of the curved face of the curb and level therewith. A standard U.S.C. & G.S. & S.S. bronze disk stamped "621" and set in concrete.

 Elevation: 337.000
- MON. 622-CLIFTON, PASSAIC COUNTY. On the north west side of Valley Road, about 1400.00 feet north east of Van Houten Avenue, at the nursery gardens of Bobbink & Atkins, about 1.27 ft. north west of the north west curb and level therewith. A Standard U.S.C. & G.S. & S.S. bronze disk stamped "622" and set in concrete.

Elevation: 316.310 ft.

RV 646 - ALBION PLACE (CLIFTON), PASSAIC COUNTY. On Valley Road, at the south east corner of its intersection with Silleck St., at Standard Oil Co. Gasoline Service station No. 103, about 48.1 feet east of the center line of Valley Road, about 39.5 feet south of the center line of Silleck Street on top of the north west end of a concrete island, 0.4 feet from the west face of the island, 6 inches above grade. A standard monel rivet.

Elevation: 267,147

MON. 632-CLIFTON, PASSAIC COUNTY. On the northwest side of Valley Rd., at Gould St., and flush with the curb, about 1.23 ft. northwest of the face of the curb; 58.25 ft. southwest of a nail in pole #60481-C; and 73.78 ft. northeast of a nail in pole #60480-C. A standard U.S.C.& G.S.& S.S. disk, set in concrete.

Elevation: 265.788 ft.

- MON. 633-CLIFTON, PASSAIC COUNTY. On the northwest side of Valley Rd., about 75. ft. southwest of the prolonged southwest curb line of Gourley Ave., and flush with the sidewalk. It is 5.20 ft. northwest of the face of the curb; 35.94 ft.northwest of a nail in pole #60596-0; 70.30 ft. west of the west corner of the north check wall of the borch of house #21 Valley Road. A standard U.S.C.& U.S.& S.S. disk, set in concrete.
- RV 647 PATERSON, FASSAIC COUNTY. On the east side of Valley Road, at the bridge over the D.L. & W. Railroad, in the concrete walk, 1.65 feet south of the south end of the east girder of the bridge, 15.3 feet east of the center line of Valley Road, 0.3 feet east of the face of the east curb. A standard monel rivet.

Elevation: 219.301 ft.

267.022 T

Elevation:

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

Passaie County 1934

DESCRIPTION OF BENCH MARKS

ESS-D Page 7

- RV 648 PATERSON, PASSAIC COUNTY. On the west side of stairs at the Main St. at Public School No. 8, at the stairs at the north entrance to the playground, on top and in the center of the first step from the bottom, about 35.6 feet west of the center line of Main St., 26.5 feet south of the north end of the retaining wall supporting the playground, and 0.8 feet above sidewalk level. A standard monel rivet. (Destroyed after setting.)
- 99.45 (N.J.G.S.)-PATERSON, PASSAIC COUNTY. At the south east corner of Main and Slater Streets, at the St. Boniface Church, and on the south end of the Main Street entrance. A chiseled cross.

Elevation: 30.271 meters or 99.314 feet

U 12 - PATERSON, PASSAIC COUNTY. At the intersection of Grand and New Streets, at the city reservoir, 96 feet south of the center line of Grand Street, 36 feet east of the center line of Grand Street, and in the top of the Grand Street end of the reservoir, 1.5 feet higher than the ground. A standard disk, stamped "U 12 1933."

Elevation: 53.506 meters or 175.544 feet

STATE OF NEW JERSEY

Essex County 1934

ESS-E Page

3 pages

DESCRIPTION OF BENCH MARKS

STARTING AT THE INTERSECTION OF PARK AVE., BLOOMFIELD AVE., HIGH ST AND CRITTENDEN STREET, NEWARK, N.J. AND RUNNING WEST ON PARK AVE. THROUGH NEWARK, EAST ORANGE AND ORANGE, TO MAIN ST. AND MT. PLEASANT AVE IN WEST ORANGE: THENCE WEST ON MT. PLEASANT AVE TO GREGORY AVE IN WEST ORANGE.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL, BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- RV 405 NEWARK, ESSEX CO. On the north side of Booomfield Ave., on the northwest corner of its intersection with Crittenden St., across Bloomfield Ave. from the intersection of Park Ave. and High St, at the N.J. Bell Telephone Co. Bldg., at the Bloomfield Ave. entrance thereto, 15.0 ft. east of the east curb of Bloomfield Ave., on the stone doorsill, 0.42 ft. west of the east cheek wall, 0.42 ft. north of the south edge of the sill, and about 3.0 ft. above the sidewalk. A standard monel rivet. Elevation: 75.504 ft.
- Rv. 406 -NEWARK, ESSEX CO. On the north side of Park Ave., about midway between Clifton Ave. and Ridge St., at the Hospital and Home for Crippled Children, at the main entrance, on the southeast corner of the first, or bottom, step leading thereto, 31.35 ft. north of the north curb of Park Ave., 0.58 ft. from the east end of the step, and 3.55 ft. from main building. A standard monel rivet. Elevation: 142.874 ft.
- Rv. 407 -NEWARK, ESSEX CO. On the north side of Park Ave., in Branch Brook Park, at the concrete bridge over Branch Brook and a driveway, at the Keystone of the north parapet of the bridge; 1.14 ft. south of the south edge and 3.0 ft. east of the west edge of the Keystone: and 15.59 ft. north of the north curb of Park Ave. A standard monel rivet. Elevation: 119.386 ft.
- Rv. 408 -NEWARK, ESSEX CO. On the southwest side of Park Ave., on the northeast corner of its intersection with Riseville Ave., at the 5th Ave. Presbyterian Church, at the Park Ave. entrance thereto, on top of the westerly cheek wall of the steps leading to the entrance; 2.22 ft. south of the south wall of the church; 0.75 ft. east of the west edge of the brown stone cap stone of the wall and 36.06 ft. north of the north curb of Park Ave. A standard monel rivet.

Elevation: 142.054 ft.

STATE OF NEW JERSEY

ESS*E Page 2

Essex County 1934

DESCRIPTION OF BENCH MARKS

- Mon. 405 EAST ORANGE, ESSEX CO. On the south side of Park Ave., on the southwest corner of its intersection with 15th St., 16.75 ft. west of west curb of 15th St.; 7.20 ft. south of the south curb line of Park Ave., 5.87 ft. from a 28 inch elm tree, and 2" below grade, A standard U.S.C.&G.S. &S.S. disk, set in concrete. Elevation: 124.648 ft.
- Mon. 404 EAST ORANGE, ESSEX CO. On the southwest side of Park Avel. on the southwest corner of its intersection with Greenwood Ave., 24.11 ft. northwest of northwest curb of Greenwood Ave., 3.20 ft. southwest of southwest curb of Park Ave.; 30.20 ft. southwest of a cross cut in southeast end of a traffic island in the center of Park Ave.; and 2" below grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Mevation: 139.639 ft.
- Av. 409 - EAST ORANGE, ESSEX CO. On the north side of Park Ave., between Lincoln Ave. and Clinton St., at the Ashland School, at the main entrance on the east side; 68.70 ft. north of the north curb of Park Ave.; on the southwest corner of the first step of 6 of said entrance; and 1.42 ft. west of east edge and 5" north of south end of step. A standard monel rivet. Elevation: 154.074 ft.
- Rv. 410 - ORANGE, ESSEX CO. On the north side of Park Ave., on the northeast corner of its intersection with North Day St., at the Park Ave. entrance to a Church, about 30 ft. north of the north curb of Park Ave.; on the southwest corner of the first step of a flight of said entrance; 6" west of the east edge and 5" north of the south end of step. A standard monel rivet. Elevation: 183.785 ft.
- Mon. 403 ORANGE, ESSEX CO. On the south side of Park Ave., on the southeast corner of its intersection with North Day St., 10.66 ft. south of south curb of Park Ave., 18.62 ft. east of east curb of North Day St. and 2" below grade. A stand ard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 131,460 ft.
- Mon. 402 ORANGE, ESSEX CO. On the south side of Park Ave., between Chapel and High Sts., in front of St. John's Cemetery, about 233 ft. east of Chapel St. and about 292 ft. west of High St.; 8.46 ft. south of south curb of Park Ave.; 16.60 ft. north of the concrete wall around the cemetery; 29.77 ft. east of the northwest corner of the gravestone of Annie Monahan, 19.98 ft. north of the northeast corner of stone of Sylvanus Shaw, and 2" below grade. A standard U.S.C. &G.S.&S.S. disk, set in concrete. Elevation: 211.683 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

Essex County 1934

ESS-E Page 3

DESCRIPTION OF BENCH MARKS

- Rv. 411 WEST ORANGE, ESSEX CO. On the west side of Main St., across Main St. from its intersection with Park Ave., on the circular base supporting the traffic lights; 6 inches east of the most easterly side and in front of the center of a concrete traffic pillar. A standard monel rivet.

 Elevation: 184.008 ft.
- Rv. 412 WEST ORANGE, ESSEX CO. On the west side of Mt. Pleasant Ave., between Condit St. and Lindsley Ave., at the Fairmont School (stucco); at the main entrance, on the concrete platform at the top of the steps, about 190 ft. (measured along the walk) west of the west curb of Mt. Pleasant Ave.; 0.50 ft. north of the south wall of the entrance; 1.28 ft. east of the stone door sill; and about 3.0 ft. above the curb. A standard monel rivet. Elevation: 181.552 ft.
- Rv. 404 WEST ORANGE, ESSEX CO. On the west side of Gregory Ave., on the southwest corner of its intersection with Mt. Pleasant Ave., inside the pumping station building of the Commonwealth Water Co., in the concrete floor, 3.0 ft. west of the Gregory Ave. entrance, 3.40 ft. south of the south edge of the northerly pit, 1.25 ft. north of the north edge of the southerly pit. A standard monel rivet.

 Elevation: 384.423 ft.

TIE RUN IN EAST ORANGE, ESSEX CO. N.J. TO N.J.G.S. BENCH MARKS

- MX 445 EAST ORANGE, ESSEX CO. A cross cut in the extreme north end of the third stone step from the top (the fourth from the bottom) behind a pilaster on the left of the entrance of the East Orange Free Public Library, which stands on the southeast corner of Main St. and Munn Ave. Elevation: 162.274 ft.
- Mk 446 EAST ORANGE, ESSEX CO. A cross cut in the extreme southwest corner of the top step of the most westerly entrance to the First Reformed Church, which stands on the southeast corner of Main and Halstesd Sts. This bench mark is vertically below the cross at the peak of the roof. Elevation: 180.897 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County 1935

ESS-F Page 1

STARTING AT THE INTERSECTION OF BLOOMFIELD AVENUE, POMPTON AVENUE (NEW JERSEY STATE HIGHWAY ROUTE 23), and MT. PROSPECT AVENUE, IN VERONA, ESSEX COUNTY; and RUNNING NORTH WEST THROUGH VERONA and CALDWELL INTO WEST CALDWELL, ESSEX COUNTY.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL, BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- MON. 644-VERONA, ESSEX COUNTY. On the south side of Mr. Prospect Av. about 50 feet southwest of the southwest curb of Bloomfield Avenue; 43.77 feet east of a nail in pole No. PS-60184-VA, 47.85 feet west of a cross cut on an iron trolley pole; 10.72 feet south east of the south curb of Mt. Prospect Av. and level with grade. A standard U.S.C. & G.S. & S.S. bronze disk, stamped "644" and set in concrete.

 Elevation: 474.041 ft.
- MON. 603-VERONA, ESSEX COUNTY. On the north side of Mt. Prospect Av., on the north east gorner of its intersection with Sunset Av., between the sidewalk and the curb, 70.97 feet north of the iron street sign post standing on the south east corner, 3.53 feet from the curb of Sunset Avenue, 3.63 feet from the west edge of the Sunset Avenue sidewalk, and level with the curb. A standard U.S.C. & G.S. & S.S. bronze disk, stamped "603" and set in concrete.

 Elevation: 455.377 ft.
- MON. 645-VERONA, ESSEX COUNTY. On the north side of Bloomfield Ave., about 71 feet east of the center line of Park Place, 21.10 feet south east of the south east corner of a brick building; 7.5 feet north of the north curb of Bloomfield Avenue, 52.88 feet north west of Pole No. BT-275-VB, 19.73 feet east of a cross cut in an iron trolley pole, and level with the sidewalk. A standard U.S.C. & G.S. & S.S. bronze disk, stamped "645" and set in concrete.

 Elevation: 347.955 ft.
- MON. 646-VERONA, ESSEX COUNTY. On the north side of Bloomfield Av., about 117 feet west of the center line of Grove Street; 2.80 feet southwest of the south west corner of a brick building, 7.40 feet north of the north curb of Bloomfield Avenue, 36.14 feet east of a cross cut in an iron trolley pole and level with the sidewalk. A standard U.S.C. & G.S. & S.S. bronze disk, stamped "646" and set in concrete.

 Elevation: 389.744 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County 1935

E68-F, Page 2

- RV 657 VERONA, ESSEX COUNTY. On the northeast side of Bloomfield Avenue, slightly west of the intersection of Fells Road, at the bridge over the Erie Railroad on the northwest end of a concrete slab paralleling the north girder of the bridge, 9.25 feet north of the north face of the curb, 0.61 feet north of the south edge and 0.41 feet east of the southwest end of said concrete slab and about 6 inches above the level of the curb. A standard monel metal rivet.

 Elevation: 476.660 ft.
- EON 647-CALDWELL, ESSEX COUNTY. On the south side of Bloomfield Avenue, about 500 feet west of the center line of Mountain Avenue, about 160 feet east of the center line of Ryerson Avenue, about 27.14 feet south of the center line of Bloomfield; 65.21 feet east of a cross cut in an iron trolley pole; 38.66 feet west of pole PS-561-CB, and level with grade. A standard U.S.C.&G.S.&S.S. bronze disk, stamped "647" and set in concrete.

 Elevation: 446.713 ft.
- MON 648-CALDWELL, ESSEX COUNTY. On the south side of Bloomfield Avenue; 200 feet southeast of the center line of Arlington Avenue, 60.045 feet west of a nail in pole #PS-60430-CB; 10.22 feet south east of a crose cut in an iron trolley pole, 19.30 feet northeast of a nail in pole. A standard U.S.C.&C.S.&S.S. bronze disk, stamped "648", set in the top of a concrete post flush with the ground.

 Elevation: 434.862 ft.
- RV 658 CALDWELL, ESSEX COUNTY. On the southwest side of Bloomfield Avenue, about 250 feet west of the west curb of Roseland Avenue, at the First Presbyterian Church, on the northwest end of the top step of the most westerly flight leading to the Church; 38.86 feet southwest of the southwest curb of Bloomfield Avenue, 0.74 feet south of the north end of the top step, 1.90 feet east of the west edge of the bottom step, and about 3.00 feet above the curb. A standard monel metal rivet.

Elevation: 411.237 ft.

RV 659 - CALDWELL, ESSEX COUNTY. On the south side of Academy Road between Thomas and Prospect Streets, at the Grover Cleveland High School, on the west end of the bottom one of the most easterly pair of steps leading to the school, 91.92 feet south of the south curb of Academy Road, and 0.75 feet south of the north edge of the step. A standard monel metal rivet.

Elevation: 358.064 ft.

NEW JERSEY GEOLOGICAL SURVEY

LOCAL CONTROL SURVEY STATE OF NEW JERSEY DESCRIPTION OF BENCH MARKS

Essex County 1935

ESS-F, Page 3

RV 660 - WEST CALDWELL, ESSEX COUNTY. On the north side of Bloom-field Avenue, immediately west of its junction with Clinton Road at the Julia H. Potwin Memorial Library, on the top one of the Bloomfield Avenue stens leading to the south walk to the library; 30.39 feet southeast of the southeast corner of the Library, 18.03 feet northwest of a nail 5.25 feet above grade in pole #60001-WC, 0.99 feet north of the south edge of said top step, and about 5.00 feet above sidewalk level. A standard monel, metal rivet.

Elevation: 233.944 ft.

MON 525-WEST CALDWELL TOWNSHIP, ESSEX COUNTY. On the northwest side of Dutch Lane, on the northwest corner of its intersection with Clinton Avenue, 27.00 feet northwest of the center line of Dutch Lane, 26.00 feet northeast of the center line of Clinton Avenue, 47.08 feet north of a cross cut in a manhole rim, 46.23 feet northeast of a tack in a 36-inch Elm tree atanding on the southwest corner of said intersection, and level with grade. A standard U.S.C.&G.S.&S.S. bronze disk, stamped "525" and set in concrete. Elevation: 185.812 ft.

TIE RUN IN CALDWELL TO N.J.C.S. BENCH MARKS

- MK 450 CALDWELL, Essex Co. A cross on the extreme northerly end of window sill of the first window from the street on the westerly face of the Fire House, a brick structure on the southerly side of Roseland Ave. about 200 ft, from Bloomfield Ave.
 - Elevation: 407.866 ft.
- MK 466 CALDWELL, ESSEX CO. A cross on the outer edge at the center of bluestone sill of basement window at the right of the Bloomfield Ave, entrance to the Public Library near Roseland Ave.

Elevation: 416.817 ft.

MK 452 - CALDWELL, ESSEX CO. A cross one foot out from the building and seven feet from the northwest corner, on flagstone coping of stariway leading to the basement of the Erie Railroad Station. The mark is the same elevation as the top of the blue sandstone over the cellar door. Elevation: 433.667 ft.

STATE OF NEW JERSEY

Essex County 1935

DESCRIPTION OF BENCH MARKS

Page ESS-C,

- STARTING AT GLEN RIDGE, ESSEX COUNTY, AT THE INTERSECTION OF BLOOM-FIELD AND RIDGEWOOD AVES., AND THENCE RUNNING SOUTH ON RIDGEWOOD AVE. TO NORTH PARK ST., EAST ORANGE; THENCE SOUTH-EAST ON NO. PARK ST. TO PARK AVE., ORANGE, ESSEX COUNTY.
- STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL, BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.
- MON 605-GLEN RIDGE, ESSEX COUNTY. On the southwest side of Bloomfield Ave., on the southwest corner of its intersection with Ridgewood Ave., 2.10 ft. southwest of the southwest edge of the concrete sidewalk on southwest side of Bloomfield Ave. 11.97 ft. northwest from the northwest corner of the base of a traffic signal light, and 44.19 ft. northeast of the northeast corner of the bottom of a sandstone slab on top of a parapet wall paralleling Ridgewood Ave. A standard U.S.C.&G. S.&S.S. bronze disc stamped "605" and set in concrete. Elevation: 186,559 ft.
- MON 649-GLEN RIDGE, ESSEX COUNTY. On the west side of Ridgewood Aveabout 4200 ft. south of Bloomfield Ave., about 400 ft. south of the centerline of Maolis Ave; 16.89 ft. southwest of a nail in a maple tree, 7.45 ft. northeast of a nail in a maple tree 1.32 ft. northwest of a cross cut on the curb, and level with the curb. A standard U.S.C.&G.S.&B.S. bronze disc stamped #649 and set in concrete.

Elevation: 207.593 #\$.

- MON 650-EAST ORANGE, ESSEX COUNTY. On the west side of No. Park St., across No. Park St. from its junction with Ridgewood Ave., about 30 ft. north of the north curb of Burnside St.; 32.37 ft. south east of the southeast corner of the foundation of frame dwelling No. 317 No. Park St.; 20.14 ft. northeast of a city monument stone, which stone is on the northwest of a city monument stone, which stone is on the northwest corner of No. Park St. and Burnside St.; 8.46 ft. southwest of a nail in a sycamore tree; and 1.76 ft. west of and level with the west curb of No. Park St. A standard U.S.C.&G.S.&S.S. bronze disc stamped "650" and set in concrete. Elevation 15 3.752 ft.
- RV 661 -EAST ORANGE, ESSEX COUNTY. On the east side of No. Park St., about 150 ft. south of Lake Street, on top of the north end of the concrete wall of a culvert over Wigwam Brook. A standard monel rivet. 143.182 21. Elevation:
- MON 403-ORANGE, ESSEX COUNTY. On the south side of Park Avenue, on the southeast corner of its intersection with No. Day Street. 10.66 feet south of the south curb of Park Avenue, 18.62 feet east of the east curb of North Day Street; and 2 inches below grade. A standard U. S. C. & G. S. & S. S. bronze disc stamped "405" and set in concrete.

Elegation: 181,460 ft.

Essex County 1935

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

ESS-H. Page 1

STARTING AT NEWARK, ESSEX CO., AT THE INTERSECTION OF RAYMOND BLVD.
AND THE PULASKI SKYWAY (ROUTE 25) AND RUNNING EAST TO DOREMUS AVE.;
THENCE SOUTH ON DOREMUS AVE. TO PORT ST., PORT NEWARK; THENCE WEST
ON PORT ST., TO ROUTE 25, THENCE WEST AND BOUTH ON ROUTE 25 TO HAYNES
AVE.; THENCE SOUTHWEST ON HAYNES AVE. TO FRELINGHUYSEN AVE., NEWARK.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL, BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL HET OF THE U.S. COAST & GEODETIC SURVEY.

- X 16 NEWARK, ESSEX COUNTY. On the south side of the Lincoln Highway (Raymond Blvd.), at the overhead crossing of the Pulaski Skyway (Route 25), at the most westerly concrete pier supporting the overpass, on the northeast edge of the pier, 4.20 ft. above grade. A standard U.S.C.&G.S. bronze disc set vertically and stamped "X 16 1954". (A 1st order B.M.)

 Elevetion: 10.753 ft.
- RV 1105-NEWARK, ESSEX COUNTY. On the north side of the Lincoln High-way (Raymond Boulevard), at the overhead crossing of the Pulaski Skyway (Route 25) at the most easterly concrete pier of the bent immediately north of the Lincoln Highway, on top of the concrate footing block; 10.00 ft. north of the north curb of Lincoln Highway, 4 inches west of the east face and 6 inches north of the south face of the footing block; and 5.00 ft. above the foundation platform. A standard monel rivet.

Elevation: 11.651 ft.

11_224 ft.

- MON 1116-NEWARK, ESSEX COUNTY. On the north side of Raymond Boulevard (Lincoln Highway), about 18.00 ft. west of the centerline of Doremus Ave. if extended; G.40 ft. north of the north curb of Raymond Blvd., and level with grade. A standard U.S.C.&G.S.& S.S. bronze disc stamped "1116" and set in concrete.

 Elevation: 11.712 ft.
- AV 654 -NEWARK, (PORT NEWARK), ESSEX COUNTY. On the east side of Doremus Ave., about 125 ft. north of Allegheny Ave., at the bridge carrying the Central Railroad of N. J. over Doremus Ave., on the south end of the southeast wing wall of the bridge 0.94 ft. east of the west edge of the wall, 2.07 ft. north of the south edge of the wall, and about 4.5 ft. above curb level A monel rivet.

Elevation

MON 640-NEWARK, (Port Newark), ESSEX COUNTY. On the west side of Doremus Ave., at the southwest corner of its intersection with Wilson Ave., about 30.0' south of the centerline of Wilson Ave. 7.77' southeast of pole No. 19357N, 14.06' east of a street sign, 79.50' northeast of pole No. 17761N, and 0.5 inches higher than the edge of the pavement. A standard U.S.C.&G.S.&S.S. bronze disc stamped "640" and set in concrete.

Elevation: 7.169 ft.

Essex County 1985

STATE OF NEW JERSEY

DESCRIPTION OF BENCH WARKS

ESS-H, Page 2

MON 641-NEWARK(Port Newark) ESSEX COUNTY. On the west side of Doremus Ave., about 157 ft. north of the north end of the north approach to a wooden bridge over the railroad tracks of the Oak Island Freight Yard; 55.38 ft. southwest of pole No. 59248N; 71.41 ft. northwest of pole No. 59250 N; and 1.48 ft. west of and level with the west curb of Doremus Ave. A standard U.S.C.&G.S.&S.S. bronze disc stamped "641" and set in concrete.

Elevation: 36.510 ft.

- TIDAL No. 3 (1922)-NEWARK(Port Newark), ESSEX COUNTY. In the property formerly owned by the Submarine Boat Corp., and now owned by the city of Newark, which lies south of the intersection of Doremus Ave. and Haynes Ave., about 350 ft. west of a 2-story brick building now used by the city of Newark as a machine shop; about 60 ft. southwest of the southwest corner of the municipal garage buildings, in the top of a 12 inch riveted steel pipe which was formerly a flagpole, and is surrounded by a five-pointed concrete star. Recovered and tied in to the N. J. Local Control net by C. J. Loughran and H.C. Waters, party chiefs. A standard disc stamped "3 1922".
- TIDAL No. 2 (1922) NEWARK (Port Newark), ESSEX COUNTY. In the property formerly owned by the Submarine Boat Corp. and now owned by the city of Newark, in the concrete dock wall, about 500' west of a new dividing line fence between the Newark Seaboard Terminal and the City of Newark dock; about 600 ft. east of Newark Seaboard Terminal Warehouse No. 1A. Recovered and tie in to the N. J. Local Control net by C. J. Loughran, Party Ch. A standard disc stamped "2 1922".

 Elevation: 8.644 ft.

NB 22-A-Destroyed.

MON 642-NEWARK(Port Newark), ESSEX COUNTY. On Port Street., on the north bank of the west approach to the bridge over the Pennsylvania Railroad, across from the east end of Newark Airport about 25.00 ft. north of the centerline of Port St., and about 136.6 ft. east of the centerline of Bay Ave. extended. A standard U.S.C.&G.S.&S.S. bronze gisc stamped "642" and set in concrete.

Elevation: 14.866 ft.

MON 645-MEWARK, ESSEX COUNTY. On the north side of Port Street and about where the curb curves from Port Street into Route #25 and in front of the Ninth Precinct Police Station of the City of Newark; 2.36 feet north of the north curb of Port Street; 57.05 feet south of the most southeasterly corner of Police Station and level with the curb. A standard U.S. C. & G.S. & S.S. bronze disk stamped "643" and set in concrete.

Elevation. 9.284 ft.

Essex County 1935

STATE OF NEW JERSEY

ESS-H Page 3

DESCRIPTION OF BENCH MARKS

RV 655 - NEWARK, ESSEX COUNTY. On State Highway Route 25 (Haynes Ave.) at its intersection with Routes 21 and 29, beneath the overhead crossing carrying through traffic south on Route 25 over the lane carrying northbound traffic from Route 29 into Route 25, at the most southeasterly of the four concrete columns, on top of at the northeast corner of the base. A standard monel rivet.

Elevation: 7.599 ft.

- RV 656 NEWARK, ESSEX COUNTY. On the north side of Haynes Ave., on the bridge leading from Route 25 to Frelinghwysen Ave. over the Pennsylvania Railroad tracks, about 1000° west of Route 25, on top of the well separating the sidewalk from the roadway, near the second lamp post from the Route 25 end of the bridge, 2.20 ft. north of the morth curb of Haynes Ave, 0.15 ft. west of the east end of the wall, and about 2.0 ft above the curb. A standard monel rivet.

 Elevation: 38.697 ft.
- MON 311 NEWARK, ESSRX COUNTY. On the north side of Frelinghuysen
 Ave. at the northwest corner of its intersection with Dayton St. A standard U.S.C.&G.S.&S.S. bronze disc stamped
 "311" and set in concrete.

 Elevation: 19.362 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

Essex County 1934

E88-I, Page 1

3 Page

DESCRIPTION OF BENCH MARKS

BEGINNING IN NEWARK, ESSEX COUNTY, AT THE HIGH STREET ENTRANCE TO THE ESSEX COUNTY COURT HOUSE, THENCE SOUTHWEST ON FRELINGHUYSEN AVENUE TO ELIZABETH, UNION COUNTY.

STANDARD ELEVATIONS, IN FEET ABOVE MEAN SEA LEVEL, BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL MET OF THE U. S. COAST & GEODETIC SURVEY.

68.07 (N.J.G.S.)

- 37 (City of Newark)-NEWARK, ESSEX COUNTY. At the High Street entrance to the County Court House, at the north one of the two columns, and on the top of the northeast corner of the square marble base. A chiseled cross (U.S.C.&G.S.-B.M.).

 Elevation: 20.852 meters or 68.412
- MON 308-NEWARK, ESSEX COUNTY. On the east side of High Street; 25.0 feet north of the prolonged south curb line of Mercer Street, 48.01 feet southeast of a drill hole in the side—walk on the northwest corner of Mercer and High Streets, 65.68 feet southeast of the southeast corner of a Greek Church, 29.21 feet southwest of the southwest corner of a two-story brick store #560 High Street, and 35.05 feet northwest of the northwest corner of a three-story brick building #562 High Street. A standard U.S.C.&G.S.&S.S. disk. stamped "308", set in concrete.

 Elevation: 95.052 ft.
- RV 311 NEWARK, ESSEX COUNTY. On the southeast corner of the intersection of High and Baldwin Streets, on the southwest corner of an entrance step to apartment house #636 High Street; 16.0 feet east of the east ourb of High Street, 40.0 feet south of the southeast corner of High and Baldwin Streets, 0.5 feet east of the west edge of the entrance step, and 0.83 feet north of the south end of same step. A monel metal rivet.

Elevation:

92.697 ft.

MON 309-NEWARK, ESSEX COUNTY. On the southwest corner of the intersection of High and Montgomery Streets; 2.80 feet west of the west curb of High Street; 4.0 feet south of the south curb of Montgomery Street, 22.87 feet southwest of a cross cut on the F. S. manhole rim in High Street, 95.78 feet southwest of the southwest corner stone string course of a two-and-one-half-story brick building #682 High Street, 77.41 feet northeast of the bottom brick of the northeast corner, square part of St. Barnabas Hospital, and 66.72 feet south of a cross in the west end of a stone window sill of the cellar of a two-and-one-half-story brick building. A standard U.S.C.&G.S.&S.S. disk, stamped *309*, set in concrete.

DISTURBED Elevation: 94.665 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

Essex County 1934

STATE OF NEW JERSEY
DESCRIPTION OF BENCH MARKS

ESS-I Page 2

- Rv. 312 NEWARK, ESSEX COUNTY. On the southwest corner of Freling-huysen Ave. and Pointer St., on the south end of the granite door sill at the entrance to a brick factory building (Ziegel Elsman & Co.); 98.0 ft. south of the center-line of Pointer St., 37.0 ft. west of the centerline of Frelinghuysen Ave., and 20.4 ft. north of the south edge of the factory building. A monel metal rivet.

 Elevation: 15.986 ft.
- R-11 NEWARK, ESSEX COUNTY. At the southwest corner of the intersection of Frelinghuysen Ave. and Concord St., one block north of the Lehigh Valley Railroad overhead bridge, 16 ft. west of the Frelinghuysen Ave. curb line; 13 ft. south of the Concord St. curb line, in the northeast corner of a three-story brick building owned by Lichtman & Son and built in 1905, and 5.5 ft. higher than the west curb. A standard U.S.C.&G.S.&S.S. B.M. disk, set vertically. Elevation: 4.634 meters or 15.860 ft.
- 12.65 (N.J.G.S.)
 33 (City of Newark)-NEWARK, ESSEX CO. At the northeast corner of the Frelinghuysen Ave. and Fenwick St., at the Fenwick St. entrance to fire department engine house #19, and on the east end of the door sill. A chiseled cross.
 (U.S.C.&G.S.-B.M.
 Elevation: 3.904 meters or 12.508 ft.

SPUR RUN FROM 12.65 (N.J.G.S.) to MON. 310

Non. 310 - NEWARK, ESSEX CO. On the west corner of the intersection of Frelinghuysen Ave. and Noble St., 0.52 ft. northwest of concrete walk on the northwest side of Frelinghuysen Ave., 0.72 ft. southwest of concrete walk on the southwest side of Noble St., 29.34 ft. north of crowfoot on C.I. Trolley Pole #PSC-109: 11.72 ft. south of cross cut in near rim of manhole; 46.40 ft. southwest of cross cut in concrete head of catch basin; and 54.64 ft. southwest of cross cut in near rim of manhole. A standard U.S.C.&G.S &S.B. disk, set in concrete.

Elevation: 7.886 ft.

END OF SPUR RUN FROM 12.65 (N.J.G.S.) - TO MON. 310

STATE OF NEW JERSEY

Union County Essex County 1934

ESS-I, Page 3

DESCRIPTION OF BENCH MARKS

SPUR RUN FROM 12.65 (N.J.G.S.) TO MON 311

MON 311-NEWARK, ESSEX COUNTY. On the northwest side of Freling-huysen Avenue at its junction with Dayton Street; 17.02 feet northeast of a drill hole and cross cut near the northeast end of a catch basin, 60.30 feet north of a cross cut in the rim of a manhole, 30.69 feet northwest of a cross cut in the rim of a manhole, and 3.22 feet northwest of the face of the curb. A standard U.S.C.&G.S.&S.S. disk, stamped "311", set in concrete.

Elevation: 19.362 ft.

END OF SPUR HUN FROM 12.65 (N.J.G.S.) TO MON 311

- P 11 NEWARK, ESSEX COUNTY. On State Highway Route #27, at the junction of Lowell Place and Frelinghuysen Avenue, about 800 feet southeast along Frelinghuysen Avenue from Haynes Avenue, at #646-680 Frelinghuysen Avenue; 15 feet east of the east curb line in the northwest corner of the concrete structure of the Oxweld Acetylene Corp., and 5 feet higher than the level of the curb. A standard U.S.C.&G.S.-B.M. disk, stamped "P 11 1933" and set vertically.

 Elevation: 6.931 meters or 22.739'
- RV 10 ELIZABETH, UNION COUNTY. On Newark Avenue, about 1000 feet southwest of the southwestern city limits of Newark, Essex County, about 100 feet north of the northern corner of Big Bear Market, 33 feet northwest of the center line of Newark Avenue, and in top of the stone curb. A standard monel metal tivet (U.S.C.&G.S.-B.M.).

 Elevation: 8.317 meters or 27.287
- MON 312 ELIZABETH, UNION CO. On Newark Ave. at its intersection with North Ave. on the west corner; 29.18 ft. southwest of a cut in a direction post; 35.57 ft. southwest of the bottom stone dress course in the brick pillar of a 1 story brick store on west side of Newark Ave.; 11.83 ft. southeast of the south corner of a 1 story brick tire store; and 8.16 ft. southeast of a cross cut on the rim of a manhole. A standard U.S.C.&G.S.&S.S. disk, stamped "312" set in concrete.

 Elevation: 34.253 ft.
- ELIZABETH ELIZABETH, UNION CO. In the middle of a triangle formed by the intersection of Broad St., Westminster Ave. and Prince St., at the northeast corner of a monument, and in the top of the bottom step. A standard U.S.C.KG.S. B.M. disk, stamped "Elizabeth 1933".

 Elevation: 10.114 meters or 33.182 ft.

STATE OF NEW JERSEY

Essex County 1936

ESS-J Page 1

Z PAGES

DESCRIPTION OF BENCH MARKS

STARTING AT MONTCLAIR, ESSEX CO., AT THE INTERSECTION OF BLOOMFIELD AVE. AND ORANGE ROAD AND RUNNING THENCE SOUTH ON ORANGE ROAD, HARRISON AVE. AND MAIN ST. TO PARK AVE. WEST ORANGE, RUNNING EASTERLY ON PARK AVE. TO NORTH DAY ST., ORANGE, ESSEX CO.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- Mon. 659 MONTCLAIR, ESSEX CO. On the acutheast corner of Bloom-field Ave. and Orange Road, 8.76 ft. southwest of a cross cut on the south curb of Bloomfield Ave., 11.98 ft. east of a cross cut on the east curb of Orange Road. A standard U.S.C.&G.S.&S.S. bronze disk, stamped 659 set in concrete, flush with the sidewalk.

 Elevation: 328.438 ft.
- Mon. 660 MONTCLAIR, ESSEX CO. On the west side of Orange Road, about 70. ft. north of Myrtle Ave., 33.655 ft. northeast of the southeasterly corner and 33.715 ft. easterly of the northeasterly corner of a stucco house. A standard U.S.C.&C.S.&S. bronze disk, stamped 660 set in concrete flush with the ground.

 Elevation: 313.216 ft.
- Mon. 661 MONTCLAIR, ESSEX CO. On the northwest corner of Harrison Ave. and Warren Place, 46.84 ft. west of a nail in pole #PS-3036-MR; 31.13 ft. east of a nail in a Maple tree. A standard U.S.C.&G.S.&B.S. bronze disk, stamped 661, set in concrete, flush with ground. Elevation: 296.919 ft.
- Mon. 662 MONTCLAIR, ESSEX CO. On the northeast corner of Harrison Ave. and Oak St., 1.51 ft. east of the east curb of Harrison Ave., 1.40 ft. north of the north curb of Oak St A stendard U.S.C.&C.3.&3.3. bronze disk, stamped 662, set in concrete, flush with ground.

 Elevation: 308.594 ft.
- Mon. 663 MONTCLAIR, ESSEX CO. On the southeast corner of High St. and Virginia Ave. 46.27 ft. east of a cross on a lamp-post; 49.96 ft. northeast of a nail in a tree. A standard U.S.C.&C.S.&S. bronze disk, stamped 663, set in concrete, flush with sidewalk.

 Elevation: 256.405 ft.

STATE OF NEW JERSEY

SIATE OF NEW OFWORT

Essex County 1936

ESS-J Page 2

DESCRIPTION OF BENCH MARKS

Mon. 664 - WEST ORANGE, ESSEX CO. On the east side of High St., about 210.0 ft. north of Chestnut St., 22.14 ft. west of the southwest corner of house #36, 23.95 ft. north-west of the northwest corner of house #40. A standard U.S.C.&G.S.&S.S. bronze disk, stamped 664, set in concrete flush with ground.

Elevation: 242.298 ft.

Mon. 402 - ORANGE, ESSEX CO. On the south side of Park Ave., between Chapel and High Sts., in front of St. John's Cemetery, about 233.0 ft. east of Chapel St. 5.46 ft. south of the south curb of Park Ave., 16.60 ft. north of the concrete wall and fence around the cemetery. A standard U.S.C.&G.S.&S.S: bronze disk, stamped 402, set in concrete, 2 inches below grade.

Elevation: 211.663 ft.

TIE RUN IN ORANGE, ESSEX CO. N.J. TO N.J. GEOLOGICAL BENCH MARKS

- MK 447 ORANGE, ESSEX CO. N.J. This bench mark is the extreme northeast corner of the base of the Soldier's & Sailors' Monument, standing at the junction of Main and South Main Sts., at the intersection of Prince St. Elevation: 195.973 ft.
- MR 448 ORANGE, ESSEX CO. N.J. A cross cut in the southeast corner (0.35) ft. from wall, 0.55 foot from end and 3.35 ft. from a stone lamp post of the stone platform at the left of the entrance of the Orange National Hank, which i located one door east of the southwest corner of Main and S. Day St.

 Elevation: 191.001 ft.
- MK 449 ORANGE, ESSEX CO. N.J. This bench mark is a point on the extreme northwest corner of the base of the monument to the "Dispatch Rider of the American Revolution" This monument stands on the northeast corner of the cemetery, at the scuthwest corner of Main and Scotland Sts.

Elevation: 219.172 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

1936 Morris County Essex County

DESCRIPTION OF BENCH MARKS

ESS-K Page 1

STARTING AT WEST CALDWELL, ESSEX CO., ON THE NORTHWEST CORNER OF CLINTON AVE. AND DUTCH LANE AND RUNNING THENCE WEST TO BLOOMFIELD AVE. THENCE NORTHWEST ALONG BLOOMFIELD AVE. THROUGH CALDWELL TWP. AND PINE BROOK TO PARSIPPANY BLVD., PARSIPPANY, MORRIS CO. N.J.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST &GEODETIC SURVEY.

- Mon. 525 WEST CALDWELL, ESSEX CO. On the northwest corner of Clinton Ave. and Dutch Lane, 27.0 ft. northwest of the centerline of Dutch Lane; 26.0 ft. northeast of the centerline of Clinton Ave. A standard U.S.C.&G.S.&S.S. disk, set in concrete, flush with the ground.

 Elevation: 185.812 ft.
- Rv. 2300 WEST CALDWELL, ESSEX CO. On the northwest corner of Bloomfield Ave. and Sanford Ave., 52.74 ft. east of pole #WC-60304; 51.96 ft. southwest of pole #60881-WC. A standard monel metal rivet, set in a concrete monument. Elevation: 180.095 ft.
- Rv. 2301 WEST CALDWELL, ESSEX CO. On the north side of Bloomfield Ave., 0.5 mile east of the bridge over Passaic River, 54.96 ft. north of pole #WC-60193; 22.0 ft. northeast of the centerline of Bloomfield Ave. A standard monel rivet, set in a concrete monument

 Elevation: 176.045 ft.
- Rv. 2302: WEST CALDWELL, ESSEX CO. On the north side of S.Highway Rte. #6, (Bloomfield Ave.) in the northeasterly pier of the bridge over the Passaic River; at the Morris and Essex County Line. A standard monel metal rivet. Elevation: 179.340 ft.
- Rv. 2303: PINE BROOK, MORRIS CO. On the scuth side of S. Highway Rte. #6 (Bloomfield Ave.,) about 0.5 mile west of the bridge over the Passaic River at the Morris-Essex Co. Line, on top and in the center of the westerly concrete end post of the southerly parapet wall of a highway bridge over a branch of the Passaic River, about 3.0 ft. above the ground. A standard monel metal rivet.

 Elevation: 176.235 ft.
- Mon. 2300 PINE BROOK, MORRIS CO. On south side of S.H. Rte. 6, (Bloomfield Ave.) about 100' east of John St., 39.13 ft. west of northwest corner of Pine Brook Inn; 20.9 ft. south of centerline of Righway. A standard U.S.C.&G.S. &S.S. disk, set in concrete, flush with the ground. Elevation: 180.445 ft.

Morris Co. 1936

STATE OF NEW JERSEY

ESS-K Page 2

DESCRIPTION OF BENCH MARKS

- Mon. 2301 PINE BROOK, MORRIS CO. On the north side of S.H. Rte. #6, (Bloomfield Avé.) about 0.13 miles east of Hook Mountain Road; 19.0 ft. north of the centerline of the Highway; 81.0 ft. northwest of northwest corner of house of E. Van Wert. A standard U.S.C.&G.S.&S.S. disk, set in concrete, flush with the ground.

 Elevation: 183.332 ft.
- PINE BROOK PINE BROOK, MORRIS CO. On the south side of S.H. Rte. #6 (Bloomfield Ave.) about 0.3 mile east of Rockaway River Bridge, about 50. ft. south of the centerline of Route #6. in the approximate center of a 20 ft. high road bank. A standard U.S.C.&G.S. Triangulation Station bronze disk, set in concrete, and stamped "Pine Brook-1935".

Elevation: 230.464 ft.

- Rv. 2304 PARSIPPANY, MORRIS CO. On the south side of S.H. Rta.
 #6 (Bloomfield Ave.) About 1.6 miles west of the bridge
 over the Passaic River at the Morris-Essex Co. Line
 on top of the southwesterly concrete end post of the
 parapet well of the concrete bridge over the inundated
 area adjacent to the Rockaway River and being about 200
 ft. west of the main bridge over the Rockaway River.
 A standard monel metal rivet.

 Elevation: 181.121 ft.
- Rv. 2305 PARSIPPANY, MORRIS Co. On the north side of S.H. Rte. #6 (Bloomfield Ave.) 0.45 miles east of Edwards Road 33.52 ft. west of a fire hydrent; 29.5 ft. north of the centerline of highway. A standard monel metal rivet set in a concrete monument.

 Elevation: 192.869 ft.
- Rv. 2306 PARSIPPANY, MORRIS CO. On the northwest corner of S.H. Rte. #6 (Bloomfield Ave.) and Edwards Road, 21.23 ft. south of pole #PTH-40443; 74.90 ft. west of pole #611. A standard monel metal rivet set in concrete monument, 35 ft. north of centerline of Rte. 6.

 Elevation: 175.017 ft.
- Rv. 2307 PARSIPPANY, MORRIS CO. On the north side of S.H. Rte. #6, (Bloomfield Ave.) about 2.55 miles west of the bridge over the Passaic River at the Morris-Essex Co. Line, in the top of the easterly concrete end post of the northerly perapet wall of a concrete bridge, over a branch of Troy Brook. A standard monel metal rivet. Elevation: 176.149 ft.

Morris Co. 1936

STATE OF NEW JERSEY

ESS-K Page 3

DESCRIPTION OF BENCH MARKS

- Mon. 2302 PARSIPPANY, MORRIS CO. On the south side of S.H. Rte. #6, (Bloomfield Ave.,) about 0.45 miles east of Beverwyck Road; 16.3 ft. south of center line of Highway, 51.30 ft. west of pole #NJP&L-8250. A standard U.S.C &G.S.&S.S. bronze disk, stamped 2302, set in concrete, flush with the ground. Elevation: 177.795 ft.
- Mon. 2303 PARSIPPANY, MORRIS CO. On the northeast corner of S.H. Rte. #6, (Bloomfield Ave.) and Beverwyck Road 8.87 ft. southwest of a fire hydrant; 24.2 ft. north of the centerline of Rte. #6, 44.2 ft. east of the centerline of Beverwyck Road. A standard U.S.C.&G.S.&S.B. disk, etamped 2303, set in concrete, flush with the ground. Elevation: 222.711 ft.
- Mon. 2304 PARSIPPANY, MORRIS CO. On the south side of S.H. Rte. #6 (Bloomfield Ave.) about 58. ft. west of the centerline of Summit Ave. if produced, 27.5 ft. south of the centerline of Route #6, 63.65 ft. southwest of a fire hydrent. A standard U.S.C.&G.S.&S.S. disk, set in concrete, stamped 2304, flush with the ground.
 Elevation: 250.278 ft.
- Rv. 2308 PARSIPPANY, MORRIS CO. On the north side of S.H. Rte. #6, (Bloomfield Ave.) and on the easterly side of the entrance road to Parsippany-Troy Hills Public School. 52.55 ft. northeast of pole 40880-PTA; 25.0 ft. north of the centerline of Route #6. A standard monel metal rivet, set in a concrete monument, 3.60' SW of Vail Rd. signpost. Elevation: 305.178 ft.
- PARSIPPANY, MORRIS CO. On the northeast corner of S.H. Rte. #6 (Bloomfield Ave.) and Vail Road, 24.0 ft. north Rv. 2309 of the centerline of Route #6, 12.83 ft. west of a nail in a 28 inch Maple tree. A standard monel metal rivet set in a concrete monument, 3.60' SW of Vail Rd. sign-post. Elevation: 281.682 ft.
- Mon. 5328 PARSIPPANY, MORRIS CO. On the north side of S.H. Rte. #6 (Bloomfield Ave.) about 215 ft. east of Littleton Road about opposite a 21 story frame house and in the top of the dam of the Jersey City Reservoir. A standard U.S.C.&G.S.&S.S. disk, stamped 5328, set in concrete, flush with the ground, 11'SW of top of face of dam.

 Elevation: 311.656 ft.

Morris Co. 1936

STATE OF NEW JERSEY

ESS-K Page 4

DESCRIPTION OF BENCH MARKS

- Mon. 5329 PARSIPPANY, MORRIS CO. On the north side of S.H. Rte. #6, (Bloomfield Ave.) about 0.15 miles east of Parsippany Blvd. and about opposite the Parsippany Methodist Church; in the dam of the Jersey City Reservoir; 146.85 ft. north of a nail in a 24 inch Maple tree; 111.10 ft. north of a nail in pole #CJP-7156. A standard U.S.C.&G.S.&S.S. disk, stamped 5329, set in concrete, 0.25 ft. below the ground.

 Elevation: 312.121 ft.
- Mon. 2305 PARSIPPANY, MORRIS CO. On the northeast corner of S.H. Rte. #6 (Bloomfield Aw.) and Parsippany Blvd., 30.0 ft. north of centerline of Rte. #6, 43.73 ft. southeast of a nail in a 30 inch Elm tree. A standard U.S.C.&G.S. &S.S. disk, stamped 2305, set in concrete, flush with the ground, 22.0' E face pole #PTH-40393. Elevation: 315.911 ft.

STATE OF NEW JERSEY

Essex County 1936

DESCRIPTION OF BENCH MARKS

ESB-L Page 1

3 PAGES

STARTING AT LIVINGSTON, ESSEX CO., AT THE TRAFFIC CIRCLE AT THE INTERSECTION OF S.H. RTE. 10 AND BEAUFORT AVE., RUNNING THENCE WEST ON RTE. 10 TO WALNUT ST. SOUTH ON WALNUT ST., NORTHFIELD ROAD AND PASSAIC AVE. TO THE D.L.&W. RR. CHATHAM, MORRIS CO. N.J.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- Mon. 533 LIVINGSTON TWP., ESSEX CO. In Livingston Traffic Circle at the intersection of Beaufort Ave., Roosevelt Ave. and Rte. 10, about 122.0 ft. north of south edge and about 129.0 ft. south of north edge of traffic circle, measured from points in the perimeter thereof where same intersects the centerline of Beaufort Ave; about 186.0 ft. east of the west edge and about 232.0 ft. west of the east edge of traffic circle, measured from points in the perimeter thereof where same intersects the centerline of Rte. 10; 13.47 ft. southwest of a cross cut in the rim of a N.J. Bell Telephone Co. manhole, 12.88 ft. southeast of a cross cut in the rim of a N.J. Bell Telephone Co. manhole, 12.88 ft. southeast of a cross cut in the rim of a Binghamton Gas Gate Valve, and level with the ground. A standard U.S.C.& G.S.&S.S. bronze disk, stamped 533 and set in concrete. Elevation: 192.773 ft.
- Rv. 3709 LIVINGSTON TWP., ESSEX CO. On the east side of Walnut St. about 0.2 mile south of S.H. Rte. #10, in the north headwall of a concrete culvert over a stream; 13.56 ft. north of pole #CJP-10016; 17.20 ft. east of the centerline of Walnut St. A standard monel metal rivet.

 Elevation: 203.955 ft.
- Rv. 3710 LIVINGSTON TWP., ESSEX CO. On the east side of Walnut St. about 0.8 mile south of S.H. Rte. #10, in the north headwall of a concrete culvert over a stream; 48.98 ft. south of pole #BT-521-LVT; 17.6 ft. east of centerline of Walnut St. A standard monel metal rivet.

 Elevation: 203.869 ft.
- Rv. 3711 LIVINGSTON TWP., ESSEX CO. On the south side of Walnut St. about 1.3 miles south of S.H. Rte. #10 in the top of a concrete curb; 36.90 ft. southwest of a fire hydrant #5122; 15.33 ft. south of centerline of Walnut St. A standard monel metal rivet.

 Elevation: 220.463 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY DESCRIPTION OF BENCH MARKS

Essex & Morris

ESS-L Page 2

- Rv. 3712 LIVINGSTON TWP., ESSEX CO. On the south side of South Orange Ave., about 600. ft. west of the centerline of Passaic Ave., and about 1.8 miles south of S.H. Rte. #10. in the east side of the south headwall of a concrete culvert over a stream; 47.25 ft. northwest of pole #40238-LVT; 16.20 ft. south of centerline of South Orange Ave. A standard monel metal rivet.

 Elevation: 188.936 ft.
- Rv. 3713 LIVINGSTON TWP. ESSEX CO. On the west side of Passaic Ave., about 1000 ft. south of South Orange Ave., in the foundation on the east side of house #40 (M. Saltman); 11.92 ft. north of the southerly end of house; 46.80 ft. west of centerline of Passaic Ave. A standard monel metal rivet.

Elevation: 200.288 ft.

- Rv. 3714 LIVINGSTON TWP., ESSEX CO. On the southwest side of W. Livingston Ave., about 450. ft. southeast of the centerline of Passaic Ave., and about 2.7 miles south of S.H. Rte. #10; in the east side of the south headwall of a concrete culvert over a stream; 45.03 ft. north-west of pole #CJP-10215; 32.0 southwest of centerline of West Livingston Ave. A standard monel metal rivet.

 Elevation: 176.158 ft.
- Rv. 3715 FLORHAM PARK, MORRIS CO. On the east side of Passaic Ave., about 1.8 miles north of Main St. Chatham, in the southeast abutment of lower Chatham Bridge over the Passaic River; 49.13 ft. northeast of pole #FBP-40192; 19.2 ft. east of centerline of Passaic Ave. A stendard monel metal rivet, 4.20' below top of pavement.

 Elevation: 173.156 ft.
- Rv. 3716 CHATHAM, MORRIS CO. On the east side of Passaic Ave., about 1.1 miles north of Main St., Chatham, in the northwest corner of the control house of the Madison-Chatham Sewage Disposal Plant; about 650. ft. east of Passaic Ave. A standard monel metal rivet.

 Elevation: 187.602 ft.
- Rv. 3717 CHATHAM, MORPIS CO. On the west side of Passaic Ave.

 O.5 mile north of Main St., Chatham, and just north of
 Weston Ave. in the easterly entrance of a house belonging
 to H. Kremer; 65.0 ft. west of centerline of Passaic Ave
 13.6 ft. north of the southeast corner of the foundation.
 A standard monel metal rivet.

 Elevation: 201.659 ft.

STATE OF NEW JERSEY

Morris County 1936

DESCRIPTION OF BENCH MARKS

ESS-L Page 3

- Rv. 2350 CHATHAM, MORRIS CO. On the northwest corner of Main St. and Elmwood Ave. about 145 ft. west of the center line of Elmwood Ave., 140.0 ft. north of the centerline of Main St., in the concrete base of the south opening Porte Cochere of the Ogden Memorial Presbyterian Church. A standard monel metal rivet. Elevation: 247.474 ft.
- CHATHAM 1935 CHATHAM, MORRIS CO. 240. ft. south of the D.L.&W.
 RR Station in Chatham at the line between the School Property and Railroad Property; 220.0 ft. west of centerline of track; 30.0 ft. erst of centerline of driveway to School Building. A standard U.S.C.&G.S.B.E. disk, stamped "Chatham 1935". (A 2nd order B.M.).

Elevation: 244,494 ft.

TIE TO N.J.G.S. IN CHATHAM

- CHATHAM, MORRIS CO. N.J. A cross cut in the west end of the sill (2 inches from the edge, three and one-half MK 458 inches from the brick wall and 10 inches from the door saddle) at the entrance to the Mayor's Office and Library at the west end of the Town Hall, which stands on the north side of Fairmount Ave. between the D.L.&W. AR and Main St.
 - Elevation: 233.573 ft. (Disturbed)
- MK 459 - CHATHAM, MORRIS CO. N.J. A cross cut in the stone parapet on the east side of the steps leading to the front entrance of the public-school building, which stands on the north side of Fairmount Ave, just west of the D.L.&W. RR. The parapet measures four feet by 2.7 feet; the cross is 0.7 foot from the side of the building; 3.3 feet from the end of the parapet and two feet from the pilaster just east of the entrance. Elevation: 262.427 ft.
- CHATHAM, MORRIS CO. N.J. A cross cut in the north post of the west wall of an arch bridge which carries MK 465 Main St, over a small stream at the junction of Main and Lafayette Sts. Elevation: 209.704 ft.

SURVEY LOCAL CONTROL

STATE OF NEW JERSEY

Essex County

ESS-N Page 1 Z PAGES

DESCRIPTION OF BENCH MARKS

STARTING AT NEWARK, ESSEX CO. AT THE INTERSECTION OF BLOOMFIELD AVE. AND 13th ST. RUNNING SOUTH ON 13th ST. TO SECOND AVE. EAST ON SECOND AVE. TO ROSEVILLE AVE., SOUTH ON ROSEVILLE AVE. TO 12th AVE. WEST ON 12th AVE. TO SOUTH TWELFTH ST. SOUTH ON SOUTH TWELFTH TO SPRINGFIELD AVE., NEWARK, ESSEX CO.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- Mon. 607 NEWARK, ESSEX CO. On the south side of Bloomfield Ave., on the southwest corner of its intersection with 13th St. about 10.0 ft. south of the south ourb of Bloomfield Ave. and flush with grade. A standard U.S.C.&O.S.&S.S. bronze disk, set in concrete. Elevation: 102.997 ft.
- Mon. 543 NEWARK, ESSEX CO. On the southwest corner of 13th St. and 2nd Ave. 1.56 ft. south of the south curb of 2nd Ave., 11.65 ft. west of the west curb of 13th St. standard U.S.C.&G.S.&S.S. disk, set in concrete, flush with the ground. Elevation: 108.380 ft.
- Mon. 544 NEWARK, ESBEX CO. On the northwest corner of Roseville Ave. and Second Ave. 1.43 ft. north of the north curb of Second Ave., 23.40 ft. east of the east curb of Roseville Ave. A standard U.S.C.&G.S.&S.S. diek, set in concrete, flush with the ground. Elevation: 119,446 ft.
- Rv. 408 NEWARK, ESSEX CO. On the southwest side of Park Ave., on the northeast corner of its intersection with Roseville Ave., at the 5th Ave. Presbyterian Church, at the Park Ave. entrence thereto, on top of the westerly cheek wall of the steps of the entrance; 2.22 ft. south of the south wall of Church; 0.75 ftl east of the west edge of the brownstone cap stone of the well and 36.06 ft. north of the north ourb of Park Ave. A standard monel metal rivet. Elevation: 142.054 ft.
- Rv. 548 NEWARK, ESSEX CO. On the west side of Roseville Ave., just north of Main St., at the main entrance of the old Essex Troop Armory, in the north end of the cheek wall. and Q65 ft. east. of the face of the building. A standard monel metal rivet. Elevation: 145.298 ft.

STATE OF NEW JERSEY

Essex County 1936

ESS-M Page 2

DESCRIPTION OF BENCH MARKS

- Mon. 545 NEWARK, ESSEX CO. On the northwest corner of Roseville
 Ave. and Central Ave. 12.15 ft. southeast of the southeast corner of building #509 Central Ave., 9.93 ft.
 northeast of a cross out on steel electric light pole.
 A standard U.S.C.&G.S.&B.S. disk, set in concrete,
 flush with ground, stamped 545.

 Elevation: 182.710 ft.
- Mon. 547 NEWARK, ESSEX CO. On the west side South 12th St., about 21.0 ft. south of the centerline of 12th Ave. (if produced), 9.45 ft, west of a drill hole in the west curb of South 12th St., 12.23 ft. northwest of pole #PSC-133. A standard U.S.C.&G.S.&S.8. disk, set in concrete, flush with ground.

 Elevation: 195.285 ft.
- Mon. 548 NEWARK, ESSEX CO. On the northwest corner of South Orange Ave., and South 12th St. 2.45 ft. west of the west curb of South 12th St., 11.4 ft. north of the north curb of South Orange Ave. A standard U.S.C.&G.S. &S.S. disk, set in concrete, flush with ground. Elevation: 208,398 ft.
- Rv. 305 NEWARK, ESSEX CO. On the south side of Springfield Ave., on the southwest corner of itsintersection with Pierce St., at the entrance to the 2 story brick house #12 Pierce St., and on the north end of the top step thereat, about 275.0 ft. south of the intersection of the centerlines of Springfield Ave., and Pierce St. and about 30.0 ft. west of the centerlines of Pierce St. A standard monel metal rivet.

 Elevation: 207.624 ft.

1936

ESS-N Page 1

3 PAGES

Essex-Morris Co.

STATE OF NEW JERSEY DESCRIPTION OF BENCH MARKS

STARTING AT LIVINGSTON, ESSEX CO. AT THE TRAFFIC CIRCLE AT RTE. 10 AND BEAUFORT AVE. RUNNING WEST ON RTE. 10 TO WRIPPANY, MORRIS CO.

STANDARD ELEVATIONS IN FEET ABOVE MEAB SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET.

Mon. 533 - LIVINOSTON TWP., ESSEX CO. In Livingston Traffic Circle, at the intersection of Beaufort Ave., Roosevelt Ave., and Rte. 10, about 122.0 ft. north of south edge and about 129.0 ft. south of the north edge of traffic circle measured from points in the perimeter thereof where same intersects the center line of Beaufort Ave., about 186.0 ft. east of the west edge and about 232.0 ft. west of the east edge of traffic circle, measured from points in the perimeter thereof where same intersects the center line of Rte. 10; 13.47 ft. southwest of a cross cut in the rim of a sewer manhole, 12.51 ft. northwest of a cross cut in the rim of a N.J. Bell Telephone Co. manhole 12.88 ft. southeast of a cross cut in the rim of a Binghamton Gas Gate Valve, and level with the ground. A standard U.S.C.&G.S.&S.S. disk, stamped 533, set in concrete.

Elevation: 192.773 ft.

Rv. 544 - LIVINGSTON TWP., ESSEX CO. On the south side of Mt. Pleasant Ave., (Rte. 10) about 1.45 miles west of Livingston Center, on the west side of the traffic circle at the intersection of Beaufort Ave. and Mt. Pleasant Ave., at a concrete culvert over a small stream; in the top of the concrete post at the west end of the south headwall of the culvert, 1.20 ft. east of the west face, and 0.44 ft. south of the north face of the post. and about 3.5 ft. higher than the pavement. A standard monel rivet.

Elevation: 189,491 ft.

- Rv. 3709 LIVINGSTON TWP., ESSEX CO. On the east side of Walnut St. about 0.2 mile south of S.H. Rte. #10, in the north headwall of a concrete culvert over a stream; 13.56 ft. north of pole #GJP-10016; 17.20 ft. east of the centerline of Walnut St. A standard monel metal rivet. Elevation: 203.955 ft.
- Rv. 662 LIVINGSTON TWP., ESSEX CO. On the north side of S.H. Rte. #10, about 43.5 ft. west of Walnut St. and about 0.38 miles west of the Livingston Traffic Circle, in the northwest end of concrete curb of catch basin; ft. north of centerline of highway. A standard monel metal rivet.

Elevation: 207.372 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County Morris Co.

1936

ESS-N Page 2

- Mon. 666 LIVINGSTON TWP., ESSEX CO. On the south side of S.H. Rte. 10 about 870. ft. southeast of the centerline of the Passaic River Bridge, 22.25 ft. south of centerline of Highway; 10.09 ft. west of a cross cut in the east edge of Highway slab #273. A standard U.S.C.&G.S. &S.S. disk, set in concrete, flush with the ground. Elevation: 185.661 ft.
- Rv. 663 EAST HANOVER TWP., MORRIS CO. On the north side of S.H.

 Rte. 10, in the northwest wingwall of the concrete bridge over the Passaic River, about 1.0 mile west of the traffic circle in Livingston; 38.0 ft. north of centerline of Highway; and about 52.0 ft. west of centerline of Passaic River. A standard monel metal rivet.

 Elevation: 177.315 ft.
- Mon. 665 EAST HANOVER TWP., MORRIS CO. On the north side of S.H. Rte. #10, about 1100 ft. west of the centerline of the Passaic River Bridge, and about 625, ft. east of a road leading to Restland Memorial Park; 29.0 ft. north of the centerline of the Highway; 19.18 ft. north of a cross cut in the edge of highway slab #1344. A standard U.S.C.&G.S.&S.S. disk, set in concrete, flush with the ground.

 Elevation: 178.646 ft.
- Rv. 664 EAST HANOVER TWP., MORRIS CO. On the north side of S.H.
 Rte. 10, about 1.75 miles west of the traffic circle in
 Livingston, in the westerly end of the north headwall
 of a concrete culvert over a stream. A standard monel
 metal rivet.

 Elevation: 194.818 ft.
- Rv. 665 EAST HANOVER TWP., NORRIS CO. On the north side of S.H.
 Rte. 10, about 2.28 miles west of the traffic circle in
 Livingston, in the northerly end of the easterly concrete
 headwall (over ditch) to a nursery entranceway.41.4 ft.
 north of the centerline of S.H. Rte. 10, and about 99.0
 ft. east of the centerline of a bridge over a stream.
 A standard monel metal rivet.
 Elevation: 206.852 ft.
- Rv. 666 EAST HANOVER TWP., MORRIS CO. On the south side of S.H. Rte. 10, about 2.75 miles west of the traffic circle in Livingston, and about 33.5 ft. east of the east side (ranged) of the Blue Door Grill; in the easterly end of a concrete headwall of a culvert over a stream; 26.0 ft. south of centerline of Rte. #10. A standard monel metal rivet.

Elevation: 219.945 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Morris Co. 1936

ESS-N Page 3

- HAIT EAST HANOVER TWP., MORRIS CO. On the south side of S.H. Rte. 10, 2.8 miles west of the traffic circle in Livingston and about 1139 ft. south of S.H. Rte. 10, in the southeast corner of a field belonging to Mr. Hait, along a brush line running east and weet. A standard U.S.C.& G.S. Triangulation Station, monument, atamped "Hait-1935". Elevation: 255.923 ft.
- Rv. 667 -EAST HANOVER TWP., MORRIS CO. On the north side of S.B.
 Rte. 10, about 3.25 miles west from the traffic circle
 in Livingston, and about 35.0 ft. north of the centerline
 of the highway. In the northwest wingwall of the S.H.
 Bridge over Whippany River. A standard monel metal rivet.
 Elevation: 186.018 ft.
- Rv. 668 -HANOVER TWP., MORRIS CO. On the north side of S.H. Rte.

 10 about 3.75 miles west of traffic circle in Livingston,
 and about 750. ft. east of the easterly side of a Sunoco
 Service Station Bldg., in the westerly end of the northerly concrete headwall of aculvert over a stream. 44.90
 ft. north of the centerline of Rte. 10. A standard
 monel metal rivet, 40° E of pole JCP-6226.

 Elevation: 179.927 ft.
- Rv. 5314-WHIPPANY, MORRIS CO. On the north side of S.H. Rte. #10, on top of the northwest step pier in the rear of the northwesterly column base at the entrance to a building occupied by the First National Bank of Whippany. A standard monel metal rivet, 0.25 ft. from face of building. Elevation: 197.938 ft.

TIE TO N.J.G.S. BENCH MARKS IN HANOVER

- MK 463 HANOVER, MORRIS CO. N.J. A cross 16 feet from the rail in the center and on the south end of concrete culvert under the Morristown and Eric Railroad just east of highway crossing, three-tenths of a mile west of the station. Elevation: 193.246 ft.
- MK 464 HANOVER, MORRIS CO. N.J. A cross 1.2 ft. below the rail and five feet away on the northerly end of east concrete abutment of Morristown and Eric Railroad bridge over a Highway eight-tenths of a mile east of the station.

 Elevation: 216.582 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Essex County 1936

ESS-P Page 1

STARTING AT NEWARK, ESSEX CO. AT THE INTERSECTION OF ROSEVILLE AND CENTRAL AVES. RUNNING EAST ON CENTRAL AVE. TO HIGH ST. NEWARK, ESSEX CO.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GOEDETIC SURVEY.

- Mon. 545 NEWARK, ESSEX CO. On the northwest corner of Roseville Ave. and Central Ave. 12.15 ft. southeast of the southeast corner of Building #509 Central Ave., 9.93 ft. northeast of a cross cut on steel electric light pole. A standard U.S.C.&G.S.&S.S. disk, set in concrete, flush with the ground, stamped 545.

 Elevation: 182.710 ft.
- Mon. 546 NEWARK, ESSEX CO. On the southwest corner of Central Ave. and First St., 8.51 ft. northeast of the northeast corner of a building on the southwest corner; 7.95 ft. south of a cross cut in a steel trolley pole. A standard U.S.C.&G.S.&S.S. disk, set in concrete, stamped 546. Elevation: 137.890 ft.
- Rv. 607 NEWARK, ESSEX CO. On the northeast corner of High St. and Central Ave., at St. Michael's Hospital, on the south end of the first step of the High St. entrance nearest Central Ave. A standard monel metal rivet.

 Elevation: 60.078 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY DESCRIPTION OF BENCH MARKS

Passaic County 1934

PAS-A Page 1

STARTING AT PASSAIC, PASSAIC CO., AT THE INTERSECTION OF PASSAIC AND VAN HOUTEN AVENUES, AND THENCE RUNNING TO THE PASSAIC MUNICIPAL BUILDING AT HOWE AVE. AND PROSPECT ST., THENCE NORTH TO CLIFTON AVE. AND EAST ON CLIFTON AVE. TO MCLEAN BLVD.; THENCE NORTH ON MCLEAN BLVD. (STATE HIGHWAY ROUTES 3 & 4) TO BROADWAY, PATERSON: THENCE EAST ON BROADWAY (ROUTE 4) TO ARCOLA (PARAMUS), BERGEN COUNTY.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- Rv. 640 PASSAIC, PASSAIC CO. On the southeast side of Passaic Ave., west of its intersection with Van Houten Ave., at the D.L. &W. Railroad Station, in the hand rail of the stairs leading to the west platform, at the apex of the second concrete post from the bottom; 5.86 ft. from the west retaining wall of the railroad embankment; 23.0 ft. southeast of the southeast curb of Passaic Ave., and about 10 ft above the curb. A standard monel rivet.

 Elevation: 53.440 ft.
- 60.31 (NJGS) PASSAIC, PASSAIC CO. On the northwest corner of Howe Ave. and Prospect St., at the Municipal Bldg., on the stone water table about 5.40 ft. south of the entrance; 1.83 ft. above the sill and 2.33 ft. above the sidewalk. A cross cut.

 Elevation: 60.462 ft.
- Rv. 1502 CLIFTON, PASSAIC CO. On the south side of Clifton Ave., on the southeast corner of its intersection with First St., at Clifton Grammar School #10, on top of the west end of the bottom step of the flight leading to the main entrance, and near the building wall. A stendard monel rivet Elevation: 69,385 ft.
- Rv. 1501 ATHENIA (CLIFTON), PASSAIC CO. On the east side of Clifton Ave., on the northeast corner of its intersection with Clifton Boulevard, at Clifton Grammar School #6, on top of the northeast end of the bottom step of the flight leading to the main entrance, and near the building wall. A standard monel rivet.

 Elevation: 116.024 ft. REMOVED
- Rv. 1503 CLIFTON, PASSAIC CO. On the south side of Clifton Ave., east of Lexington Ave. at Clifton Grammar School #12, on top of the west end of the bottom step of the flight leading to the main entrance, and near the building wall. A standard monel rivet.

 Elevation: 42.939 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Passaic County Bergen County 1934

PAS-A Page 2

- 37.18 (NJHD) PATERSON, PASSAIC CO. On the west side of McLean Blvd. (Rte. 4), north of Crooks Ave., at Cedar Lawn Cemetery, at the main entrance, on the south side of foundation of south gete post. A painted mark.

 Elevation: 36.965 ft.
- Mon. 1509 PATERSON, PASSAIC CO. At the intersection of McLean Blvd. (Rte. 4) and Market St., in the west side of the main traffic island, 1.48 ft. east of the west curb of the island; 9.48 ft. southwest of the southwest edge of a sewer maninole cover in the island; 106.30 ft. northeast of a fire hydrant on the southwest corner of the intersection; 100.82 ft. southeast of the southeast corner of the foundation of the office building of a Gas Station located on the northwest corner of the intersection, and level with curb. A standard U.S.C.&G.S.&S.S. disk, set in concrete. M.evation: 46.482 ft.
- Mon. 1506 EAST PATERSON, BERGEN CO. On the south side of Broadway (Rte. 4) near the east end of the Broadway Bridge over the Passalc River, on the southeast corner of its intersection with River Road; 1.35 ft. south of the south curb of Broadway; 54.44 ft. east of the north corner of a catch basin in the east curb of River Road; 101.18 ft. southeast of a fire hydrant across Broadway; and level with the curb. A standard U.S.C.&G.S.&S.3. disk, set in concrete.

Elevation: 60.485 ft.

Mon. 1507 - PATERSON, PASSAIC CO. On the west side of McLean Blvd., (Rtes. 3 & 4), in East Side Park, near the south end of the most southerly traffic island at the west end of the Broadway Bridge over the Passaic River; 1.30 ft. west of the west curb of McLean Blvd.; 42.58 ft. west of a monel rivet located at the center of curvature of the south end of the traffic island; 29.21 ft. north of a lamp post; 99.85 ft. south of an 18 inch Button-Ball tree and level with the curb. A standard U.S.C.&G.S.&S.S. disk set in concrete.

Elevation: 44.327 ft.

Q-12 - PATERSON, PASSAIC CO. On Broadway, at the concrete bridge over the Passaic River, 45 ft. north of the center line of the street, and in the top of the north end of the east concrete balustrade, 3.5 ft. higher than the sidewalk. A standard disk, stamped *Q-12 1933 (A first order B.M.).

Elevation: 16.758 meters or 54.980 ft.

NEW JERSEY GEOLOGICAL SURVEY

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Passaio County Bergen County 1934

PAS-A Page 3

- Mon. 1516 PATERSON, PASSAIC COUNTY. On the north side of Broadway, on the northwest corner of its intersection with 33rd St. 11.50 ft. north of the north curb of Broadway; 8.60 ft. west of the west curb of 33rd St.; 30.0 ft. southeast of the southeast corner of the brick chimney of the building located on said corner; and level with the sidewalk. A standard U.S.C.&G.S.&S. & disk, set in concrete.

 Elevation: 66.931 ft.
- Mon. 1517 PATERSON, PASSAIC COUNTY. On the north side of Broadway, on the northwest corner of its intersection with 24th St., 14.26 ft. north of the north curb of Broadway, 13.43 ft. west of the west curb of 24th St.; 32.0 ft. southeast of the southeast corner of the chimney of the building located on said corner; and level with the sidewalk. A standard U.S.C.&G.S.&S.S. disk set in concrete.

Elevation: 88.803 ft.

- Rv. 24 PATERSON, PASSAIC COUNTY. At the intersection of Broadway and E. 29th St., 33 ft. east of the centerline of East 29th St., 24 ft. south of the centerline of Broadway, and in the top of the concrete foundation of a metal telephone pole. A standard monel rivet. (A lst. order B.M.).

 Elevation: 23.197 meters of 76.105 ft.
- Rv. 25 PATERSON, PASSAIC COUNTY. At the intersection of Broadway and Graham Ave., at the Church of the Messiah, 13 ft. south of the south curb of Broadway, and in the top of the east end of the bottom step of the entrance to the church, 1 ft. higher than the sidewalk. A standard monel rivet. (A lst order B.N.).

 Elevation: 32.615 meters or 107.004 ft.
- Mon. 1905 PATERSON, (EAST) BERGEN COUNTY. On the south side of Broadway, (Rte. 4), slightly west of the west side of Summit St., prolonged, 11.43 ft. south of the south edge of the pavement; 113.40 ft. southwest of a fire hydrant located on the northeast corner of 7th St.; 44.0 ft. south of the centerline of Broadway; 2.31 ft. northeast of pole #571584; 76.78 ft. northwest of the northwest corner of a brick building; 72.35 ft. northeast of the northeast corner of a frame dwelling; and level with the curb. A standard U.S.C.&G.S.&S.3. disk, set in concrete.

Elevation: 80,219 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

Passaic County Bergen County 1934

PAS-A Page 4

DESCRIPTION OF BENCH MARKS

RV 23 - WARREN POINT, BERGEN COUNTY. At the intersection of State Highway 4 and Fifth Avenue, about 2 mile east of the Eric Railroad overhead crossing, 30 feet north of the center line of the highway, 15 feet west of the center line of Fifth Avenue, and in the top of the concrete curb. A standard monel rivet. (A First Order B.M.)

Elevation: 21.703 meters or 71.204 feet

MON. 1502-SADDLE RIVER TOWNSHIP, BERGEN COUNTY. On the north side of State Highway Route No. 4, at its intersection with State Highway Route 4 A, in the south west edge of the traffic island, 1.54 feet north east of the curb of the island; 111.1 feet north west of the south west end of a catch basin on the south east side of said traffic island; 184.60 feet north east of the east end of a catch basin located on the north west corner of said route intersection and 134.92 feet north west from the west end of a catch basin located on the south side of Route 4. A standard U.S.C. & G.S. & S.S. bronze disk stamped "1502" and set in concrete.

Elevation: 57.471 ft.

RV 22 - WARREN POINT, BERGEN COUNTY. On State Highway 4, at a golf practice range, about 1,500 feet west of the highway bridge over Saddle River, 33 feet south of the center line of the highway, and in the top of the west concrete curb. A standard monel rivet. (A First Order B.M.)

Elevation: 21.017 meters or 68.953 feet

- MON. 1501-ARCOLA(PARAMUS), BERGEN COUNTY. On the north side of Route 4, east of Saddle River about 298.5 feet east of the center line of Paramus Road, 7.95 feet north of the north edge of the pavement, 39.74 feet northeast of Pole no. 60451, 134.33 feet north east of the north east corner of the catch basin in the south curb of Route 4 and nearest to Paramus Road and level with grade. A standard U.S.C. & G.S. & S.S. bronze disk stamped "1501" and set in concrete. Elevation: 51.334 ft.
- N 12 ARCOLA, BERGEN COUNTY. On State Highway 4, at the bridge over Saddle River, 45 feet north of the center line of the highway, and in the top of the east end of the north balustrade of the bridge, 4 feet higher than the sidewalk. A standard U.S.C. & G.S. & S.S. bronze disk stamped "N 12-1933" and set in concrete. (A First Order B.M.)

 Elevation: 17.785 meters
 58.350 feet

NEW JERSEY

GEODETIC CONTROL SURVEY
DESCRIPTION OF BENCH MARKS

Passaic County 1937

PAS-A Page 5

SPUR RUN: MON. 1509 TO MON. 1508

Mon. 1508 - PATERSON, PASSAIC CO. N.J. On the east side of McLean Blvd., (Rte. 3, S.H.), about 130 ft. south of the centerline of 17th Ave., 23.25 ft. east of the edge of pavement; 44.85 ft. south of the south edge of P.V. Sewer manhole; and 89.25 ft. southeast of the southeast curb corner of catch basin on the west side of the Blvd. A standard U.S.C.&G.S.&S.B. diak, set in concrete, flush with the ground.

Elevation: 53.817 ft.

END OF SPUR RUN

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

Passaic County Easex County 1934-1935

DESCRIPTION OF BENCH MARKS

PAS-B. Page 1

BEGINNING AT THE INTERSECTION OF VAN HOUTEN AVE. AND VALLEY ROAD, CLIFTON, PASSAIC COUNTY, AND RUNNING SOUTH ON VALLEY ROAD INTO MONTCLAIR, ESSEX COUNTY.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL, BASED ON THE 1929 OF ERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST & GEODETIC SURVEY.

- Mon. 621 CLIFTON, PASSAIC COUNTY. On the northeast side of Van Houten Ave., on the northeast corner of its intersection with Valley Road, about 1.71 ft. east of the curved face of the curb and level therewith. A standard U.S.C. &G.S.&S.S. diak, set in concrete.

 Elevation: 337.000 ft.
- Rv. 644 GREAT NOTCH, PASSAIC COUNTY. On the east side of Valley Road, about 400. ft. south of Great Notch Road, directly across the highway from the frame house of H. Hamilton, in the center of the top of the north end of the east wall of a culvert, 8.65 ft. east of the east curb of Valley Road, 12.94 ft. north of the centerline of the culvert, 0.42 ft. south of the north end of the wall, about 4. ft. above the curb. A standard monel rivet. Elevation: 262.150 ft.
- Mon. 624 CLIFTON, PASSAIC COUNTY. 1.40 ft. southeast of the southeast curb of Valley Road, about 1100 ft. north of Hibben Place, 14.57 ft. southwest of pole #C-60222; near the Robin Hood Inn; and level with the curb. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 341.267 ft.
- Mon. 625 CLIFTON, PASSAIC COUNTY. On the southeast side of Valley Road, 80.0 ft. northeast of its intersection with Normal Ave., 1.0 ft. south of the southeast curb of Valley Road and level with the curb. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation: 378.000 ft.
- Mon. 626 MONTCLAIR, ESSEX COUNTY. On the east side of Valley Road, 45.0 ft. north of its intersection with Glenwood Road, 1.0 ft. east of the east curb of Valley Road and level with curb. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

Elevation: 346.777 et.

Essex County 1985

STATE OF NEW JERSEY

PAS-B, Page 2

DESCRIPTION OF BENCH MARKS

- MON 627 -MONTCLAIR, ESSEX COUNTY. On the west side of Valley Road, 65.00 ft. north of its intersection with Jerome Place, 1.00 foot west of the west curb of Valley Road and level with the curb. A standard U.S.C.&G.S.&S.S. bronze disc stamped "627" and set in concrete.
 - Elevation: 355.273 ft.
- RV 649 MONTCLAIR, ESSEX COUNTY. On the west side of Valley Road, across Valley Rd. from its intersection with Cooper Ave., at Standard Oil Co. gasoline station No. 572 on the main concrete island, 26.16 ft. west of the west curb of Valley Road, 44.22 ft. southwest of the southeast corner of the Valley Road Garage building, 37.15 ft. north of Public Service light pole No. 4341 MC, 12.10 ft. south of the north end of the island, 0.36 foot west of the east face of the island and about 6 inches above grade. A standard monel rivet.

Elevation: 336.539 ft.

- RV 650 -MONTCLAIR, ESSEX COUNTY. West of Valley Road on the south side of Parkway, about 270 ft. west of the west curb of Valley Road, in the center of the top of the east end of the south wall of a culvert, across the street from frame dwelling, No. 9 Parkway, 43.14 ft. south of a nail in the most southwesterly trunk of a triple willow tree, 26.06 ft. east of a nail in a 1 ft. tree, 11.12 ft. south of the south curb of Parkway, 0.86 ft. south of the north face of the culvert wall, 1.54 ft. west of the east face of the culvert wall. A standard monel rivet.

 Elevation: 312.718 ft.
- MON 628 MONTCLAIR, ESSEX COUNTY. On the west side of Valley Road, about 27.00 ft. south of the south curb of Rydal Place, 1.50 ft. west of the west curb of Valley Road and level with the Gurb. A standard U.S.C.&G.S.&S.E. Stamped "628" and set in concrete.

 Elevation: 337.188 ft.
- MON 629 -MONTCLAIR, ESSEX COUNTY. On the east side of Valley Road, about 75.00 ft. south of the south curb of Williams St., about 7.00 ft. east of the east curb of Valley Road and level with the curb. A standard U.S.C.&G.S.&S. dise stamped "629" and set in concrete.

 Elevation: 337.160 ft.
- RV 602 MONTCLAIR, ESSEX COUNTY. On the south side of Bloomfield Ave., on the southeast corner of its intersection with South Mountain Ave., at the Montclair Art Museum, in the marble floor of the porch facing South Mountain Ave., 0.8 ft. from the east wall and 9.05 ft. from the north wall of said porch. A standard monel rivet.

 Elevation: 373,467 ft.

STATE OF NEW JERSEY

Passaic County

DESCRIPTION OF BENCH MARKS

PAS-D Page 1

STARTING AT SINGAC, PASSAIC CO. ON POMPTON AVE.? (N.J.S.H. RTE. 23) AT THE PASSAIC RIVER BRIDGE, AND RUNNING WEST ON S.H. RTE. 6 THROUGH SINGAC AND MOUNTAIN VIEW TO ITS INTERSECTION WITH TWO BRIDGES ROAD IN CALDWELL, ESSEX CO., THENCE RUNNING SOUTH ON TWO BRIDGES ROAD (PEER LANE OR DUTCH LANE) THROUGH CALDWELL TWP. AND WEST CALDWELL TO BLOOMFIELD AVE.; THENCE SOUTH ON PASSAIC AVE. THROUGH WEST CALDWELL AND ROSELAND TO EAGLE ROCK AVE.; THENCE WEST TO SEAUFORT ROAD (SWAMP RD.) TO S.H. RTE. 10 (MT. PLEASANT AVE.) IN LIVINGSTON: THENCE EAST ON MT. PLEASANT AVE. TO PROSPECT AVE., WEST ORANGE, ESSEX COUNTY.

STANDARD ELEVATION IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE U.S. COAST AND GEODETIC SURVEY.

- Rv. 510 SINGAC, PASSAIC CO. On the east side of Rte.,23, (Pompton Ave.) about 750.0 ft. north of Main St., about 27.0' east of the centerline of Pompton Ave., at the southeast end of the Highway Bridge over the Passaic River, on top of easterly balustrade and about 4.0' higher than the sidewalk. A standard monel river.

 Elevation: 174.795 ft.
- Mon. 514 ~ MOUNTAIN VIEW, WAYNE TWP., PASSAIC CO. At the southeast and of the traffic circle at the intersection of Rtes. 6 and 23, 7.62 ft. southeast of a monel rivet set in concrete at east side of safety isle; 5.65 ft. northeast of monel rivet set in southeast corner of concrete of said isle; and 31.8 ft. east of pole 2830~W. A standard U.S.C.&G.B. &B.S. disk, set in concrete, in an abandoned gas plug and about 0.8 ft. below the pavement surface.

 Elevation: 168.981 ft.
- Rv. 511 WAYNE TWP., PASSAIC CO. On the north side of Rte. 6, (Pellington Blvd.), about 1500.0 ft. east of Rte. 23, about 21.0 ft. north of the centerline of Rte. 6 and at a culvert on the northerly headwall, on top of the northeast corner. A standard monel rivet.

 Elevation: 167.681 ft.
- Rv. 535 MOUNTAIN VIEW, WAYNE TWP, PASSAIC CO. On the north side of Rte. 6, about 0.08 mile southwest of its intersection with Rte. 23, on the west side of the right-of-way of the Erie RR., about 26.0 ft. north of the centerline of Rte. 6, on top of the southwest corner of the concrete base of a signal relay box and about 6* above the pavement. A standard monel rivet.

 DESTROYED Elevation: 170.752 ft.

Essex County Passaic County 1935

STATE OF NEW JERSEY

PAB-D. Page 2

DESCRIPTION OF BENCH MARKS

- MOUNTAIN VIEW, WAYNE TWP., PASSAIC CO. On the south side of Rte. 6, about 0.25 mile west of its intersection with Rte. 23, in front of the 25 story frame house of W. Wilson, 21.0 ft. south of the centerline of Rte. 6, On the south side Mon. 515 49.52 ft. west of a nail in pole #60064; 70.11 ft. northeast of the northeast corner of a State Highway Monument. 64.63 ft. northeast of a nail in pole #60065; and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 170.226 ft.
- MOUNTAIN VIEW, WAYNE TWP., PASSAIC CO. On the north side of Rte. 6, about 0.55 mile southwest of its intersection with Rte. 23, at the concrete bridge over Singac Brook, Rv. 536 about 20.50 ft. north of the centerline of Rte. 6, on top of the curb near the west end of bridge and 6" above the pavement. A standard monel rivet. Elevation: 168.868 ft.
- MOUNTAIN VIEW, WAYNE TWP., PASSAIC CO. On the north side Mon. 516 of Rte. 6, about 0.56 mile west of its intersection with Rte. 23, near the concrete bridge over Singac Brook, 58.00 ft. west of the northwest corner thereof, about 19.00 ft. north of the centerline of Rts. 6, 10.0 ft. west of the joint between slabs #1043 and #1044; 74.38 ft. northwest of the center of the northwest (bevelled) corner of the post at the southwest corner of bridge, and flush with the grade. A standard U.S.C.&C.S.&S.S. disk, set in concrete. Elevation: 167.792 ft.
- CALDWELL TWP., ESSEX CO. On the north side of Rte. 6, about 0.49 mile northeast of its intersection with Two Mon. 517 Bridges Road, about 150.0 ft. west of the canterline of the bridge over the Passaic River; about 23.00 ft. north of the centerline of Rte. #6; 29.83 ft. west of the intersection of the faces of the wing wall and the back wall of bridge; 51.18 ft. northwest of the northwest (bevelled) corner of the end post at the south-west corner of the bridge, and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 171.661 ft.
- CALDWELL TWP., ESSEX CO. On the northeast side of Rte. 6, on the northeast corner of its intersection with Two Mon. 518 Bridges Road, 3.96 ft. southwest of a crows foot cut in the standard of a direction signal; 81.29 ft. north of the northeast corner of the southeast brick pillar in a concrete island at a gas station on the southeast corner of the intersection, and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 169.232 ft.

Essex County 1935

STATE OF NEW JERSEY

PAS-D Page 3

DESCRIPTION OF BENCH MARKS

- Rv. 537 CALDWELL TWP., ESSEX COUNTY. On the east side of Two Bridges Road, about 0,22 mile south of its intersection with Rte. 6, at the wooden bridge over Green Brook, about 28.0 ft. east of the centerline of Two Bridges Road, on top of the northeast corner of the concrete foundation at the southeast corner of said wooden bridge, and level with the pavement. A standard monel rivet. Elevation: 168.430 ft.
- CALDWELL TWP., ESSEX CO. On the northeast side of Two Bridges Road, about 0.31 mile southeast of its intersection with Rte. 6,; 33.67 ft. east of a cross cut in the northeast corner of slab #26; 19.10 ft. north of a cross cut Mon. 519 - CALDWELL TWP., ESSEX CO. in the southeast corner of elab #26; 53.10 ft. southeast of a tack in pole #BT-144-CT; and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete, Elevation: 169.782 ft.
- Mon. 520 CALDWELL TWP., ESSEX CO. On the west side of Peer Lane, about 33.0 ft. south of the centerline of Green Brook Ave. about 26.0 ft. west of the centerline of Peer Lane; 55.8 ft. southeast of pole #BT-318-CT; and 41.13 ft. east of a tack one ft, above ground in a tree 18 inches in diameter, and fluen with grade. A standard U.S.C.&O.S.&S.S. disk, set in concrete. Elevation: 184.370 ft.
- Mon. 521 CALDWELL TWP., ESSEX CO. On the east side of Dutch Lane, on the south point of the angular plot made by its intersection with Peer Lane, 29.00 ft. west of the centerline of Peer Lane; 120.20 ft. south of a street right-of-way monument; 43.37 ft. southeast of pole #60451-CT; 73.98 ft. west of pole #PS-582-CT; and flush with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete. Elevation: 182.564 ft.
- Mon. 522 WEST CALDWELL, ESSEX CO. On the east side of Dutch Lane, about 0.69 mile south of Green Brook Ave., across the street from the Caldwell Air Port, 21.0 ft, east of the center-line of Dutch Lane; 67.21 ft. south of the center of the top of the south post in a concrete culvert; 82.0 ft. southeast of the center of the top of a concrete post at the southwest corner of said culvert; 61.01 ft. north of pole #P3-573-CT; and flush with grade. A standard U.S.C. &G.S.&S.S. disk, set in concrete.
 Elevation: 181.694 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

Hesex County 1934

DESCRIPTION OF BENCH MARKS

PAS-D Page 4

- Mon. 523 WEST CALDWELL, ESSEX CO. On the east side of Dutch Lane on the northeast corner of its intersection with Fairfield Ave., about 19.0 ft. north of the center line of Fairfield Ave., about 32.0 ft. east of the centerline of Dutch Lane, 46.53 ft. northeast of a cross cut in a manhole cover rim, 28.62 ft. northwest of pole #PS-102-WC; 18.57 ft. south of pole #E-50609-WC; and level with the ground. A standard U.S.C.&G.S.&S.B. disk, set in concrete.
- Elevation: 195.761 ft.
- Mon. 524 WEST CALDWELL, ESSEX CO. On the northwest side of Dutch Lane, about 0.50 mile north of Bloomfield Ave., 23.0 ft. northwest of the centerline of Dutch Lane, about 200.0 ft. north of a concrete culvert, 50.97 ft. west of a nail in pole #PS-781-WC; 100.45 ft. northwest of a nail in pole #PS-780; and level with the ground. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation: 187.446 ft.
- Mon. 525 WEST CALDWELL, ESSEX CO. On the northwest side of Dutch Lane, on the northwest corner of its intersection with Clinton Ave., 27.0 ft. northwest of the center line of Dutch Lane, 26.0 ft. northeast of the centerline of Clinton Ave., 47.08 ft. northeast of the centerline hole rim, 46.23 ft. northeast of a tack in a 36 inch elm tree on the southwest corner of said intersection and level with grade. A standard U.S.C.&G.S.&S.S. disk, set in concrete.
- RV 538 WEST CALDWELL, ESSEX CO. On the west side of Passaic Ave., about 0.43 mile south of Bloomfield Ave., 15.50 ft. west of the centerline of Passaic Ave., at a concrete bridge over Pine Brook, in the center of the top of the southwest end post of the bridge and about 3.0 ft. above the crown of the road. A standard monel rivet.

 Elevation: 186.919 ft.
- Rv. 539 WEST CALDWELL, ESSEX CO. On the southeast side of Passaic Ave., shout 0.18 mile southwest of Westville Ave., about 24.0 ft. southeast of the centerline of Passaic Ave., at a concrete bridge over a brook; 13.20 ft. south west of the northeast end of the southeast parapet wall, in the center of the top of the concrete post in the parapet and directly over the southeast wingwall; and about 3.0 ft. above the pavement. A standard monel rivet.

Elevation: 205.585 ft.

STATE OF NEW JERSEY

Essex County 1934

DESCRIPTION OF BENCH MARKS

PAS-D. Page 5

- Mon. 526 WEST CALDWELL TWP., ESSEX CO. On the northwest side of Passaic Ave., about 0.28 mile north of Harrison Ave., off a sharp bend in Passaic Ave., about 21.0 ft. northwest of the centerline of Passaic Ave., 5.08 ft. east of a tack in pole #60065-WC; 59.88 ft. west of a tack 1.50 ft. above ground in a 14 inch beech tree, 62.88 ft. northwest of a tack 1.50 ft. above ground in a 10* tulip tree, and level with ground. A standard U.S.C.&G.S.&S.S. disk, set in concrete.
- Rv. 540 WEST CALDWELL TWP., ESSEX CO. On the east side of Passaic Ave., on the northeast corner of its intersection with Harrison Ave., about 24.0 ft. north of centerline of Harrison Ave.; 22.0 ft. east of centerline of Passaic Ave., on top of a curved condrete retaining wall, 30.0 ft. south of the north end of the wall, (measured on the curve), and about 3.0 ft. above the crown of the road. A standard monel rivet. Elevation: 236.920 ft.
- Mon. 527 WEST CALDWELL TWP., ESSEX CO. On the east side of Passaic Ave. on the northeast corner of its intersection with Harrison Ave., about 19.0 ft. north of the centerline of Harrison Ave.; 24.0 ft. east of the centerline of Passaic Ave.; 42.06 ft. east of a tack in pole #50007-RB; and 35.57 ft. north of a 2* hole in a cross out in a concrete retaining wall on the south side of Harrison Ave., in the top of a curved concrete retaining wall, 5.8 ft. southeast of Rv. 540; and about 3.0 ft. above the pavement. A standard U.S.C.&G.S.&S.S. disk, set in concrete retaining wall.

 Elevation: 236.932 ft.
- Mon. 528 ROSELAND TWP., ESSEX CO. On the west side of Passaic Ave., about 300.0 ft. north of the centerline of Beaufort Ave., about 250.0 ft. south of a light story frame house; about 13.0 ft. west of the centerline of Passaic Ave., 10.66 ft. southeast of a tack 1.5 ft. above ground in a 10" beech tree, 7.68 ft. northeast of a tack one foot above ground in pole #60387-RB, and level with the ground. A standard U.S.C.&G.S. &S.S. disk, set in concrete.

 Elevation: 212.455 ft.
- Mon. 529 ROSELAND TWP., ESSEX CO. On the east side of Passaic Ave., or the northeast corner of intersection with Eagle Rock Ave., 59.0 ft. north of centerline of Eagle Rock Ave., about 17.0 ft. east of the centerline of Passaic Ave.; 5.84 ft. southwest of a nail 1.0 ft. above ground in a 6" cedar tree, 7.0 ft. west of a nail 1.0 ft. above ground in an 6" cedar tree, level with the ground. A standard U.S.C.&G.S.&B.B. disk, set in concrete. Elevation: 211.560 ft.

STATE OF NEW JERSEY

Essex County

1934

DESCRIPTION OF BENCH MARKS

PAS-D Page 6

- Rv. 541 ROSELAND TWP., ESSEX CO. On the west side of Beaufort Ave., on the northwest corner of its intersection with Eagle Rock Ave., at the Public Service Office and Garage, about 105.0 ft. northwest of the centerline of Beaufort Ave., 42.30 ft. northeast of the southeast corner of said building, in the northwest corner of the top concrete step of the southerly pair of concrete steps leading thereto. A standard monel rivet.

 Elevation: 184.533 ft.
- Rv. 542 LIVINGSTON TWP., ESSEX CO. On the east side of Beaufort Ave., about 0.45 mile south of the Morristown & Erie RR Crossing, about 15.0 ft. east of the centerline of Beaufort Ave.; about 40.0 ft. north of the north line of a lastory frame house #307 Beaufort Ave.; 20.50 ft. northeast corner of a concrete box, 0.35 ft. south of the north edge and 0.60 ft. west of the east edge of the box, and about 6° below the crown of the road. A standard monel rivet.

Elevation: 234.142 ft.

- Rv. 543 LIVINGSTON TWP., ESSEX CO. On the east side of Beaufort Ave., about 1.05 mile north of its intersection with Rte. 10, about 22.50 ft. east of the centerline of Beaufort Ave at a concrete culvert over a brook, in the center of the south end of the east headwall of said culvert, 0.5 ft. north of the south face of the wall, and about level with the crown of the road. A standard monel rivet.

 Elevation: 211.825 ft.
- Mon. 530 LIVINGSTON TWP., ESSEX CO. On the east side of Beaufort Ave., about 0.70 mile north of the Livingston Traffic Circle, about 13.0 ft. east of the centerline of Beaufort Ave., 14.39 ft. north of top mut of fire hydrant #4423; 49.96 ft. south of a nail 2.0 ft. above ground in pole LVT-40031, and level with ground. A standard U.S.C.&G.S. &S.S. disk, set in concrete.

 Elevation: 219.533 ft.
- Mon. 531 LIVINGSTON TWP., ESSEX CO. On the west side of Beaufort Ave., about 0.40 mile north of Livingston Traffic Circle 42.0 ft. south of intersection of the centerlines of Beaufort Ave. and Harding Place, 21.0 ft. west of the centerline of Beaufort Ave.; 18.59 ft. northeast of a tack in windowsill of 12 story frame house; 56.30 ft. southwest of tack 1.50 ft. above ground in pole LVT-40020; 46.67 ft. northwest of a nail 1.50 ft. above ground in pole LVT-40019, and level with ground. A standard U.S.C. &G.S.&S.S. disk, set in concrete.

 Elevation: 202.803 ft

STATE OF NEW JERSEY

Essex County

1934

DESCRIPTION OF BENCH MARKS

Pas-D Page 7

Mon. 532 - LIVINGSTON TWP., ESSEX CO. On the west side of Beaufort Ave., about 0.20 mile north of Livingston Traffic Circle, about 92.0 ft. north of a concrete culvert over a brock, 41.0 ft. west of the centerline of Beaufort Ave.; 84.62 west of the center of the top nut in fire hydrant #4413; 54.76 ft. north of nail one foot above ground in pole #40009/ 92.49 ft. north of a cross cut in the north end of the west coping of said concrete culvet, and level with the ground. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

Elevation: 183.302 ft.

Hon. 533 - LIVINGSTON TWP., ESSEX GO. On Livingston Traffic Circle, at the intersection of Beaufort Ave., Rocsovelt Ave., and Rte. 10, about 122.0 ft. north of the south edge and 129.0 ft. south of the north edge of circle, measured from points in the perimeter thereof where same intersects the centerline of Beaufort Ave.; 186.0 ft. east of the west edge and about 232.0 ft. west of the east edge of circle, measured from points in the perimeter where it intersects the centerline of Rte 10; 13.47 ft. southwest of a cross cut in the rim of a manhole; 12.51 ft. northwest of a cross cut in rim of manhole; 12.68 ft. southeast of a cross cut in rim of a Binghamton Gas Gate Vale, and level with the ground. A standard U.S.C.&G.E.&S.S. disk, set in concrete.

Elevation: 192.773 ft.

- Rv. 544 LIVINGSTOR TWP., ESSEX CO. On the south side of Mt. Pleasant Age., (Rte. 10) about 1.45 miles west of the center of Livingston, on the west side of the traffic circle at the intersection of Beaufort and Mt. Pleasant Aves.; at a concrete culvert over a small stream; in the top of the concrete post at the west end of the south headwall of the culvert; 1.20 ft. east of the west face and 0.44 ft. south of the north face of the post, and about 3.5 ft. higher than the pavement. A standard monel rivet.
 - Elevation: 189,491 ft.
- Mon. 534 LIVINGSTON TWP', ESSEX CO. On the south side of Mt. Pleasant Ave., (Rte. 10), about 0.30 mile east of the Livingston Traffic Circle, about 13.0 ft. south of the centerline of Mt. PleasantAve.; 62.14 ft. west of a nail 1.50 ft. above ground in a N.J. Bell Tel. Co. pole #265# 28.65 ft. southeast of a cross cut in a manhole rim, 42.44 ft. southwest of a nail 1.50 ft. above ground in pole #CJP-10336; and level with the ground. A standard U.S.C.&C.S.&S.S. disk, set in concrete.

 Rlevations 280.581 ft.

STATE OF NEW JERSEY

Essex County 1934

DESCRIPTION OF BENCH MARKS

PAS-D, Page 8

- Mon. 535 LIVINGSTON TWP., ESSEX COUNTY. On the south side of Mt. Pleasant Ave., (Rte. 10), about 0.30 mile west of Livingston Ave., about 98.0 ft. east of the centerline of Preston Drive; 15.0 ft. south of the centerline of Mt. Pleasant Ave.; 33.69 ft. northwest of the northwest corner of the foundation of a two story frame house; 58.02 ft. west of pole #60109; 38.91 ft. south of pole #P2-592-LV; and level with the crown of the road. A standard U.S.C.& G.S.&S. disk, set in concrete.

 Elevation: 313,081 ft.
- Mon. 536 LIVINGSTON TWP., ESSEX COUNTY. On the south side of Mt. Pleasant Ave., (Rte. 10), on the southwest corner of its intersection with Livingston Ave., about 43.0 ft. west of the centerline of Livingston Ave.; 39.0 ft. south of the centerline of Mt. Pleasant Ave.; 20.98 ft. southwest of a cross cut in the rim of a manhole; 35.10 ft. southeast of a nail in an oak tree 40° in diameter; and level with the crown of the road. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation: 315.462 ft.
- Rv. 545 LIVINGSTON TWP., ESSEX COUNTY. On the south side of Mt. Pleasant Ave., (Rte. 10), about 0.41 mile east of Livingston Center, at the concrete bridge over Cance Brook, about 20.0 ft. south of the centerline of Mt. Pleasant Ave, on top and near the center of the flagstone wping of the south end of said bridge, 0.29 ft. south of the north edge of the coping, and about 2.0 ft. above ground. A standard monel rivet.

 Elevation: 328.541 ft.
- Mon. 537 LIVINGSTON TWP., ESSEX COUNTY. On the north side of Mt.
 Pleasant Ave., (Rte. 10), about 0.75 mile east of Livingston
 Traffic Circle, about 14.0 ft. north of the centerline of
 Mt. Pleasant Ave., 79.70 ft. west of a center punch on
 top of fire hydrent #1333; 38.77 ft. northwest of a nail
 1.70 ft. above ground in a pole; 51.61 ft. northwest of
 pole #LVT-60070; 53.60 ft. northeast of pl. #LVT 60071; are
 level with the ground. A standard U.S.C.&G.S.AS.S. disk,
 set in concrete.
 Elevation: 331.781 ft.
- Mon. 536 LIVINGSTON TWP., ESSEX COUNTY. On the north side of Mt.
 Pleasant Ave., (Rte. 10), at Thompson's Dairy, about 26.50
 ft. north of the centerline of Mt. Pleasant Ave., about
 47.0 ft. west of the centerline of the driveway leading
 to the dairy; 94.40 ft. west of a center punch on top of
 fire hydrant #1341; and level with the ground. A standard
 U.S.C.&G.S.&S.S. disk, set in concrete.
 Elevation: 442.448 ft.

STATE OF NEW JERSEY

Essex County 1934

DESCRIPTION OF BENCH MARKS

PAS-D Page 9

- Rv. 546 LIVINGSTON TWP., ESSEX CO. On the south side of Mt. Pleasant Ave., (Rte. 10), about 1.52 miles east of Livingston Center, at the entrance to the eatate of R.W. Kean, about 50.0 ft. south of the centerline of Mt. Pleasant Ave., on a ledge in a curved stone wall at the west side of said entrance; 43.75 ft. northwest of the northwest corner of the west end of the east portion of said wall. A standard monel rivet.

 Rievation: 560.307 ft.
- Rv. 547 WEST ORANGE, ESSEX CO. On the north side of Mt. Pleasant Ave., (Rte. 10), about 1.46 miles west of Prospect Ave., at the concrete steps leading to a one story frame house #593 Mt. Pleasant Ave., about 16.90 ft. north of the centerline of Mt. Pleasant Ave., on top of the first platform landing in the stairs, 0.50 ft. north of the south edge, and 0.27 ft. west of the east edge of said first landing, and about 0.70 ft. above the pavement. A standard monel rivet.

 Elevation: 574.418 ft.
- Mon. 539 WEST ORANGE, ESSEX CO. On the north side of Mt. Pleasant Ave., (Rte. 10), about 224.0 ft. northeast of the intersection of the centerlines of Mt. Pleasant Ave. and Pleasant Valley Way, about 36.0 ft. north of the centerline of Mt. Pleasant Ave., 20.48 ft. northwest of a cross cut in rim of an Essex Co. Manhole; 42.40 ft. northwest of P.S. pole #728-WO; and level with the ground. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation: 367.953 ft.
- Mon. 540 WEST ORANGE, EBSEX CO. On the north side of Mt. Pleasant Ave., (Rte. 10), across Mt. Pleasant Ave. from a two story frame store named "Mt. Pleasant"; about 27.50 ft. north of the centerline of Mt. Pleasant Ave.; 59.23 ft. east of a nail 2.0 ft. above ground in a 12" hickory tree; 25.53 ft. northwest of a cross cut on the rim of an Essex Co. Manhole; 7.50 ft. northwest of pole #BT-52-WO; and level with the ground. A standard U.S.C.&G.S.&S.S. disk, set in concrete.

 Elevation: 459.905 ft.
- Mon. 541 WEST ORANGE, ESSEX CO. On the north sideof Mt. Pleasant Ave., (Rte. 10), about 0.22 mile west of Prospect Ave., across the road from the driveway leading to the Essex Co. Golf Club; about 20.70 ft. north of the centerline of Mt. Pleasant Ave.; 16.14 ft. east of a cross cut in a fire hydrant; 28.59 ft. west of a nail 1.0 ft. above ground in pole #BT-71-Wo; and level with the ground. A standard U.S.C.&C.S.&S.S. disk, set in concrete.

 Elevation: 565.811 ft.

Essex County

STATE OF NEW JERSEY

1935

DESCRIPTION OF BENCH MARKS

PAS-D Page 10

- Mon. 542 WEST ORANGE, ESSEX CO. On the south side of Mt. Pleasant Ave., (Rte. 10) on the southeast corner of its intersection with Prospect Ave., about 31.25 ft. east of the centerline of Prospect Ave.; 25.40 ft. south of the centerline of Mt. Pleasant Ave.; 10.39 ft. southwest of a cross cut in the rim of an Essed Co. manhole; 4.98 ft. northwest of the northwest corner of property of L.F. Lores, and level with the ground. A standard U.S.C. &G.S.&&.S. disk, set in concrete.

 Elevation: 613.701 ft.
- Mon. 600 WEST ORANGE, ESSEX CO. On the west side of Prospect Ave.; about 1000 ft. north of its intersection with Mt. Pleasant Ave.; 91.54 ft. west of the southwest corner of the porch of frame house #470 Mt. Prospect Ave.; 92.58 ft. northwest of the southwest corner of the foundation of dwelling #478 Prospect Ave.; 16.60 ft. west of the west edge of the concrete pavement; 28.20 ft. south of the center bolt of a fire hydrant and flush with grade. A standard U.S.C.&C.S.&S.S. disk, set in concrete.

 Elevation: 628.364 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Morris Co. 1936

MOR-A Page 1

10 PAGES

STARTING AT BUTLER, MORRIS CO. N.J. AT THE N.Y.S.&W. RR AND KIKOUT CREEK, RUNNING THENCE SOUTH ON BOONTON AVE, PARSIPPANY BLVD., AND THE MORRISTOWN-WHIPPANY ROAD, THROUGH BROOK VALLEY, TAYLORTOWN, BOONTON, PARSIPPANY, HALSEYTOWN, WHIPPANY AND MORRIS PLAINS TO THE D.L.&W. RR STATION, MORRISTOWN, N.J.

STANDARD ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL BASED ON THE 1929 GENERAL ADJUSTMENT OF THE FIRST ORDER LEVEL NET OF THE ULS. COAST & GEODETIC SURVEY.

- F 13 BUTLER, MORRIS CO. On the N.Y.S.&W. RR, 90.0 ft. west of a private grade crossing, 8.0 ft. north of the north rail in the top of the north end of the center concrete pier of the bridge over Kikout Creek #3736, anf 4. ft. lower than the base of the rail. A standard U.S.C.&G.S. bronze disk, stamped "F 13 1933". (A first order B.M.)

 Elevation: 96.065 meters, 315.173 ft.
- Rv. 5335 BUTLER, MORRIS CO. On the west side of Boonton Ave.,
 O.40 mile south of the N.Y.S.&W. RR about 47.0 ft. west of
 the centerline of Boonton Ave. in a rock ledge just north
 of a brook; 35.29 ft. southeast of the southwest corner
 and 37.54 ft. south of the southeast corner of a 2 story
 frame house. A standard monel metal rivet.
 Elevation: 366.514 ft.
- Rv. 5334 BUTLER, MORRIS CO. On the southwest corner of N.J.S.H.
 Rte. 23 and Boonton Ave. in the top of the northeast corner of a concrete headwall for a drain. A standard monel rivet. Elevation; 490.669 ft.
- Rv. 5333 KINNELON BORO, MORRIS CO. On the north side of Boonton Ave. about 0.5 mile southwest of S.H. Rte. 23, and just east of a dirt road; 10.54 ft. west of pole #BMP-627; 29.0 ft. north of centerline of Boonton Ave. A standard monel rivet, set in concrete monument.

 Elevation: 696.586 ft.
- Rv. 5332 KINNELON BORO, MORRIS CO. ON the north side of Boonton Ave. about 1.10 miles south of S.H. Rte.23, about 16.0 ft. north of centerline of Boonton Ave. 12.92 ft. southwest of pole #BMP-653. A standard monel rivet, set in concrete mon. Elevation: 760.161 ft.
- Mon. 5325 KINNELON BORO, MORRIS CO. On north side of Boonton Ave.

 O.6 mile east of road leading to Fayson Lake, 25.73 ft.
 southeast of pole #BMP-756; 19.0 ft. north of centerline
 of Boonton Ave. A standard U.S.C.&G.S.&S.S. diak, set in
 concrete, 1.0 ft. below ground.
 Elevation: 674.049 ft.

LOCAL CONTROL SURVEY STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Morris County 1936

MOR-A Page 2

- Mon. 5324 KINNELON BORO, MORRIS CO. On the north side of Boonton Ave., about 0.3 mile east of road to Fayson Lake, 13.0 ft. north of centerline of Boonton Ave., 7.74 ft. southwest of pole #KN-317. A standard U.S.C.&G.S.&S.S. disk, set in concrete, 0.67 ft. below ground.

 Elevation: 651.958 ft.
- Rv. 5331 KINNELON TWP., MORRIS CO. On the south side of Boonton Ave., O.15 miles west of road to Fayson Lake, 32.0 ft. south of centerline of Boonton Ave., in a large rock (about 12 x 8') 13.06 ft. southeast of pole #BT-350-KN. 90.52 ft. south of pole JCP-211. A standard monel metal rivet.

 Elevation: 643.209 ft.
- Rv. 5330 KINNELON BORO, MORRIS CO. On the north side of Boonton Ave., about 0.75 miles southwest of road to Fayson Lake, and about 19.0 ft. north of centerline of Boonton Ave., 53.95 ft. northwest of pole #JCP-191; 137.27 ft. northeast of pole #JCP-190. A standard monel rivet, set in concrete monument, flush with ground.

 Elevation: 645.308 ft.
- Mon. 5323 MONTVILLE, TWP., MORRIS CO. On the north side of Boonton Ave., about 14.0 ft. north of centerline of Boonton Ave. 101.35 ft. northwest of pole #NJP-170; 30.86 ft. north of pole #JCP-169; 6.67 ft. east of pole #JJCP-38. A standard U.S.C.&G.S.&B.S. disk, set in concrete, 0.33 ft. below ground.

 Elevation: 643.032 ft.
- Mon. 5322 MONTVILLE TWP., MORRIS CO. On the south side of Boonton Ave., about 20.5 ft. south of centerline of Boonton Ave., 3.6 ft. east of pole #JCP-160. A standard U.S.C.&G.S. &B.S. disk, set in concrete, 1 ft. below road level. Elevation: 645.071 ft.
- Rv. 5329 MONTVILLE TWP., Morris Co. On the north side of Boonton Ave., about 0.7 mile northeast of Taylortown Corners 69.13 ft. west of pole #JCP-147; 19.0 ft. east of a nail in an 18 inch hickory tree. A standard monel metal rivet, set in a concrete monument flush with ground. Elevation: 639.385 ft.

STATE OF NEW JERSEY

Morris County 1936

DESCRIPTION OF BENCH MARKS

MOR-A Page 3

- Rw. 5325 TAYLORTOWN, MONTVILLE TWP., MORRIS CO. On the north-west side of Boonton Ave., adjacent to the Taylor-town School, in top of the southwest corner of a concrete inspection shaft of the town of Boonton Acquaduct Tunnel about 50. ft. Nwest of the centerline of the road. 69.62 ft. east of the southeast corner and 71.59 ft. southeast of the northeast corner of the Taylortown School. A standard monel rivet,

 Elevation: 662.672 ft.
- Rv. 5327 MONTVILLE TWP., MORRIS CO. On the northwest side of Boonton Ave. about 0.5 mile south of Taylortown Corners, and about opposite a driveway leading to Wild Acres. 16.0 ft. northwest of centerline of road; 50.39 ft. west of pole MTE-40887. A standard monel metal rivet, set in concrete monument, flush with ground.

 Elevation: 699.364 ft.
- Mon. 5321 BOONTON TWP., MORRIS CO. On the west side of Boonton Ave. about 1.10 miles north of Wooten Rd. in Boonton. 22.0 ft. west of centerline of road; 16.35 ft. southeast of a cross cut on arock; 56.0 ft. northeast of a cross cut on southeast corner of a rock (8' x 5'). 55.79 ft. southwest of nall in pole 40541-BT. A standard U.S.C.&G.S.&S.S. disk, set in concrete, flush with the ground.

 Elevation: 759.605 ft.
- Mon. 5320 BOONTON TWP., MORRIS CO. On west side of Boonton Ave. about 0.75 miles north of Wooten Rd. in Boonton; 16.0 ft. west of centerline of road; 80.18 ft. southwest of nail in 5" red oak tree; 71.21 ft. northwest of a cross cut on a wedge shaped rock on east side of Boonton Ave. A standard U.S.C.&G.S.&S.S. disk, set in concrete, 1 ft. below the crown of the road.

 Elevation: 722.558 ft.
- Rv. 5326 BOONTON, TWP., MORRIS CO. On the south side of Boonton Ave., about 0.4 miles northeast from Wootten St., in the top of a prominent rock, (15' x 12' x12') 40.0 ft. south of centerline of road; and about 200 ft. west of the centerline of a driveway to the Boonton Water Tank on Sheep Hill. A standard monel rivet. Elevation: 722.067 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Morris County

MOR-A Page 4

- Mon. 5319 BOONTON, MORRIS CO. On the southeast side of Boonton Ave., about 149. ft. northeast of the centerline of Holmes St., 55.30 ft. southeast of the most westerly one; 34.68 ft. south of the middle one, and 45.35 ft. southwest of the most easterly one of three crosses cut in the top of the curb on the northwest side of Boonton Ave. A standard U.S.C.&G.S.&S.S. disk, set in concrete, 0.17 ft. below the sidewalk.

 Elevation: 608.062 ft.
- Mon. 5318 BOONTON, MORRIS CO. On the north side of Boonton Ave., just east of Esten St. 5.30 ft. east of the westerly one, 4.79 ft. southeast of the middle one, and 9.0 ft. southwest of the east one of three cross cuts on the face of the concrete foundation of a cemetary stone wall A standard U.S.C.&G.S.&S.S. disk, set in concrete, in an inclosed iron box.

 Elevation: 600.003 ft.
- Mon. 5317 BOONTON, MORRIS CO. On the northeast corner of Division St. and Spruce St. 31.87 ft. northeast of a cross cut on the rim of a manhole, 5.54 ft. southwest of a cross cut on a concrete bumper. A standard U.S.C.&G.S.&S.S. disk, set in concrete, 0.67 ft. below ground.

 Elevation: 425.782 ft.
- MON. 5316 BOONTON, MORRIS CO. On the southwest corner of Morris Ave. and Mein St., 6.17 ft. north of a cross cut on the end of the westerly beam and 40.76 ft. northwest of a cross cut on the end of the east beam of a bridge over the D.L.&W. RR tracks. A standard U.S.C.&G.S.&S.S. disk, set in an enclosed iron box.

 Elevation: 431.217 ft.

SPUR RUN FROM MON. 5316 TO MARK 8303.

- MK 8300(NJ@S)- BOONTON, MORRIS CO. A cross cut in the east corner of the coping stone, level with the railroad, at the north corner of the D.L.&W. RR Bridge over Rockaway River.
 - Elevation: 413.132 ft.
- MK 8301(NJGS) BOONTON, MORRIS CO. A cross on the southwest corner of the third stone of the shaft foundation of the Soldier's Monument on Main St. The point is at the top of the curved edge and 2 inches below the base of the shaft.

Elevation: 491.226.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Norris Co. 1936

MOR-A Page 5

- MK 8302(NJGS) BOONTON, MORRIS CO. A cross cut in the east end of the granite sill of the east door of the Maxfield Engine House (713 Main St.)

 Elevation: 495.057 ft.
- Rv. 5324 BOONTON, MORRIS CO. On the south side of Hill St., about 30. ft. east of the line of easterly curb of Pine St., in the top of a coping on a retaining wall.

 A standard monel metal rivet.

 Elevation: 538.404 ft.
- MK 8303 (NJGSQ BOONTON, MORRIS CO. A cross cut on the east end of the north concrete parapet under the iron fence, I ft. west of west end of wingwall on Pond Bridge, which carries Main St. over Rockaway River above the falls.

 Elevation: 494.462 ft.

END OF SPUR RUN

- Rv. 5323 BOONTON, MORRIS CO. On the west side of Main St., about 103 ft. southeast of centerline of Myrtle Ave., between the curb and the sidewalk; 1.12 ft. southwest of a cross cut on west curb of Main St.; 24.44 ft. east of the southeast corner of a brick pier of a building occupied by a barber shop. A standard monel metal rivet, set in concrete monument. flush with ground.
- set in concrete monument, flush with ground.

 Elevation: 412.043 ft.

 Rv. 5322 BOONTON, MORRIS CO. On the southeast side of Washingtonst., just north of the entranceway to the Greenwood

 Cemetary and between the curb and the sidewalk. 25.62 ft
 southwest of pole #JCP-22. A standard monel metal rivet,
 set in a concrete monument, level with the curb.

 Elevation: 379.579 ft.
- Rv. 5321 PARSIPPANY, TROY HILLS TWP., MORRIS CO. On the south side of Parsippany Blvd., just west of Intervale Road, and about 22.0 ft. south of the centerline of Parsippany Blvd. 2.5 ft. north of a wire fence 70.56 ft. east of a nail in a 30 inch oak tree. A standard monel rivet, set in concrete monument, 0.67 ft. above ground.

 Elevation: 358.842 ft.
- Mon. 5315 PARSIPPANY, TROY HILLS TWP., MCRISCO. On the northwest side of S.H. Rte. 32, (Parsippany Blvd.) about 1.3 miles north of S.H. Rte. #6; 67.67 ft. north of pole GFP-7218; 34.10 ft. southwest of a nail in a 14 inch red oak tree. A standard U.S.C.&G.S.&S.S. disk, set in concrete, 0.3 ft. below ground.

 Elevation: 337.909 ft.

STATE OF NEW JERSEY

Morris Co. 1936

DESCRIPTION OF BENCH MARKS

Mor-A Page 6

- Mon. 5314 PARSIPPANY, TROY HILLS TWP., MORRIS (O. On the southeast side of S.H. Rte. 32 (Parsippany Blvd.) and just west of Long View Road, 41.95 ft. southeast of point of arrow on fire hydrant; 30.35 ft. west of an iron rail monument. A standard U.S.C.&G.S.&S.S. disk, set in concrete, 1 ft. below the crown of the road. Elevation: 366.645 ft.
- Rv. 5320 PARSIPPANY, TROY HILLS TWP., MORRIS CO. On the south-east side of S.H. Rte. 32 (Parsippany Blvd.) about 0.55 miles northeast of S.H. #6 and about 22.0 ft. south-east of centerline of Rte. #32. 67.97 ft. northeast of pole #CJP-7181. A standard monel metal rivet, set in concrete monument, flush with ground, Elevation: 350.740 ft.
- Mon. 2305 PARSIPPANY, MORRIS CO. On the northeast corner of S.H. Rte. #6 (Bloomfield Ave.) and Parsippany Blvd., 30.0 ft. north of centerline of Rts. #6, 43.73 ft. southeast of a nail in a 30 inch Elm tree. A standard U.S.C.& G.S.&S.S. disk, set in concrete, flush with ground. Elevation: 315.911 ft.
- Rv. 5319 PARSIPPANY, TROY HILLS TWP., MORRIS CO. On the north side of Littleton Road, about 98.0 ft. east of the centerline of Parsippany Road; 47.91 ft. northeast of pole #PPH-50278; 102.72 ft. northwest of pole #PPH-50277. A standard monel metal rivet, set in a concrete monument, 6 inches below centerline of road.

 Elevation: 324.967 ft.
- Mon. 5313 PARSIPPANY, TROY HILLS TWP., MORRIS CO. On the west side of Parsippany Road, about 2.2 miles north of S.H. Rte. #10; 21.92 ft. south of pole #CJP-7280; 44.39 ft. southwest of pole #CJP-7072 A standard U.S.C.&G.S.&S.S. diek, set in concrete, 0.67 below the crown of the road.

 Elevation: 365.583 ft.
- Mon. 5312 PARSIPPANY, TROY HILLS TWP., MORRIS CO. On the west side of Parsippany Road, about 2.0 miles north of S.H. Rts. #10, 30.50 ft. southeast of pole #RR-1377; 51.0 ft. west of pole #CJP-7060. A standard U.S.C.&G.S.& S.S. disk, set in concrete, 1 fto below crown of road. Elevation; 313.873 ft.

STATE OF NEW JERSEY

Morris Co. 1936

DESCRIPTION OF BENCH MARKS

MOR-A Page 7

- Rv. 5318 PARSIPPANY, TROY HILLS TWP., MORRIS CO. On the southeast corner of Parsippany Rd. and Helsy Road, on top and in the northwest corner of a concrete headwall of a drainage structure. A standard monel metal rivet. Elevation: 281.661 ft.
- Rv. 5317 PARSIPPANY, TROY HILLS TWP., MORRIS CO. On the east side of Parsippany Road, just north of Mallipardis Road. about 16.0 ft. east of the centerline of Parsippany Rd., 47.11 ft. southwest of a 30 inch Ash tree; 10.89 ft. west of a pole. A standard monel rivet, set in a concrete monument, flush with the ground.

 Elevation: 276.632 ft.
- Rw. 5316 HANOVER TWP., MOREIS CO. On the southeast side of Mallipardis Road, about 0.5 miles northeast of Rte. 10, and about 15.0 ft. southeast of centerline of road. 24.71 ft. southwest of a pole 53.26 ft. north of the northwest corner of a 2 story house. A standard monel rivet, set in a concrete monument, flush with ground. Elevation: 294.427 ft.
- Mon. 5311 HANOVER TWP., MORRIS CO. On the northeast corner of S.H. Rts. #10 and Jefferson Road; 74.13 ft. east of a crosscut in slab*1422; 20.14 ft. north of a cross cut in slab #1405. A standard U.S.C.&G.S.&S.S. disk, set in concrete, 0.67 ft. below the crown of road, Elevation: 275.051 ft.
- Mon. 5310 HANOVER TWP., MORRIS CO. On the southwest side of S.H. Rte. #10, about 0.3 miles southeast of the school at Jefferson Road; 16.02 ft. southwest of a cross_cut in slab*888; 72.64 ft. west of a cross cut in slab*889. A standard U.S.C.&G.S.&B.S. disk, set in concrete, flush with the ground.

 Elevation: 268.709 ft.
- Rv. 5315 WHIPPANY, HANOVER TWP., MORRIS CO. On the north side of 3.H. Rte. #10, in the most northeasterly end post of the parapet wall of the bridge (Whippany-Parsippany Rd.) over 3.H. Rte. #10. A standard monel metal rivet. Elevation: 237.130 ft.
- Rv. 5314 WHIPPANY, MORRIS CO. On the north side of S.H. Rte. #10 on top of the northwest step pier in the rear of the northwesterly column base at the entrance to a building occupied by the First National Bank of Whippany. A standard monel metal rivet.

 Elevation: 197.938 ft.

STATE OF NEW JERSEY

DESCRIPTION OF BENCH MARKS

Morris County 1936

MOR-A Page 8

- Rv. 5313 HANOVER TWP., MORRIS CO. On the south side of the Morristown-Whippany Road and just west of the Edenmille Road and about 18. ft. south of the Morristown-Whippany Road. 33.01 ft. west of an 18 inch Elm tree; 41.85 ft. northeast of a pole. A standard monel metal rivet, set in concrete monument flush with ground. Elevation: 238.577 ft.
- Mon. 5309 HANOVER TWP., MORRIS CO. On the north side of the Morristown-Whippany Road, about 0;9 miles east of the Monros-Cedar Knolls Road; 18.27 ft. south of a nail in a 12 inch Walnut tree; 35.64 ft. southwest of the point of arrow on a fire hydrant. A standard U.S.C.& G.S.&S. disk, set in concrete, 0.7 ft. below the road. Elevation: 283.546 ft.
- Mon. 5308 HANOVER TWP., MORPIS CO. On the south side of the Morristown-Whippany Road. 0.6 miles east of the Monroe-Cedar Knolla Road, 40.04 ft. west of pole #8T-526; 64.06 ft. southeast of nail in 15 inch Maple tree. A standard U.S.C.&G.S.&S.S. disk, set in concrete, 0.3 ft. below ground.

 Elevation: 306.217 ft.
- Rv. 5312 HANOVER TWP., MORPIS CO. On the south side of the Morristown-Whippany Road, just east of a road to Madison; 7.60 ft. east of pole #BT-551; 53.37 ft. southeast of a fire hydrant. A standard monel metal rivet, in a concrete monument, flush with the ground, Elevation: 289.476 ft.
- Rv. 5311 HANOVER TWP., MORRIS CO. On the west side of the Monroe-Cedar Knolls Road, about 0.6 miles north of Whippany Rd., and about in the center of the bridge over the Whippany River; 6 inches north of center balustrade post A standard monel metal rivet.

 Elevation; 259,902 ft.
- Rw. 5310 MORRIS TWP., MORRIS CO. On the southwest corner of the Morristown-Whippany Road, and Hanover Ave., and just north of a driveway leading to Morristown School for Boys. 21.72 ft. east of a 24 inch Maple tree; 60.67 ft. south of pole #BT-567. A standard monel metal rivet, set in concrete monument, flush with the ground.

 Elevation: 310.263 ft.

Local Control Survey State of New Jersey

Morris Co. 1936

Description of Bench Marks

MOR-A Page 9

- Rv. 5309 MORRIS TWP., MORRIS CO. On the north side of the Morristown-Whippany Road, about opposite road leading south to Normandy Heights about 22.0 ft. north of the centerline of the road; 13.25 ft. southwest of the southwest corner of the most westerly brick pier at an entranceway to an estate; 61.89 ft. northwest of a fire hydrant. A standard monel metal rivet, set in concrete monument, flush with the ground.

 Elevation: 390.238 ft.
- Mon. 5307 MORRISTOWN, MORRIS CO. At the intersection of Morris Ave. and Columbia Turnpike, in a small park containing an artillery field piece; 28.20 ft. west of the northwest corner of the concrete gun mounting; 49.01 ft. northeast of a cross cut on top of the south curb of Columbia Turnpike; 77.53 ft. southeast of an arrow point on a fire hydrant. A standard U.S.C.&G.S.&S.S. disk, set in concrete, O.2 ft. below ground.

 Elevation: 379.361 ft.
- Mon. 5306 MORRISTOWN, MORRIS CO. On the north side of Morris Ave. Just west of Washington Place, 23.50 ft. east of a fire hydrant; 85.66 ft. northeast of the north granite pier supporting the statue of Geo. Washington. A standard U.S.C.&O.S.&S.S. disk, set in concrete.

 Elevation: 354.554 ft.
- MORRISTOWN 1935 MORRISTOWN, MORRIS CO. 800 ft. southwest of the D.L.&W RR Station; 50. ft. northwest of Morris St. underpass; in a small park. A standard U.S.C.&G.S. disk, stamped "Morristown 1935". (2nd order B.M.) Elevation; 327.322 ft.

SPUR RUN FROM MORRISTOWN 1935 to MARK 8326

- Mon. 2357 MORRISTOWN, MORRIS CO. On the south side of S.H. Rte. #24 about opposite Pine St., 23.87 ft. northeast of the northwest corner and 42.55 ft. northwest of the northeast corner of the Woman's Work and Art Exchange Bldg. #83; 64.34 ft. southwest of the point of an arrow on a fire hydrant. A standard U.S.C.&G.S.&S. disk, set in concrete, 0.3 ft. below sidewalk.

 Elevation: 364 139 ft.
- Mk 8322 MORRISTOWN, MORRIS CO. A cross on the outer corner at the south end of a doorsill of the main entrance to the D.L.&W. RR Station. A N.J.G.Survey B.M. Elevation: 340.198 ft.

STATE OF NEW JERSEY

Morris Co. 1936

DESCRIPTION OF BENCH MARKS

MOR-A Page 10

- Mk 8323 MORRISTOWN, MORRIS CO. On the marble water-table and in the center of the angular face at the southwest corner of the post office, a brick and marble structure on the corner of Dumont and Park Place. A-N.J. G. Survey B.M. Elevation: 366.481 ft.
- Mk 8324 MORRISTOWN, MORRIS CO. A cross on the outer corner at the easterly end of a large bluestone doorsill of entrance on Park Place to the First Presbyterian Church. A-N.J. Geological Survey B.M.

 Elevation: 372.182 ft.
- MX 8325 MORRISTOWN, MORRIS CO. A cross cut in the south end of the bluestone doorsill of the south entrance from Speedwell Ave. to the Police Headquarters Building on the corner of Speedwell Ave. and Water St. A-N.J.G. Survey B.M. Elevation: 367.263 ft.
- Mk 8326 MORRISTOWN, MORRIS CO. A cross cut in the southeast end of the granite step (at the level of the granite doorsill and 6 inches above sidewalk) of the First National Bank Bldg. on Park Place. The point is at the base of the ornamental stone door jamb of iron grill. A-N.J.G. Survey B.M. Elevation: 374.155 ft.

END OF SPUR RUN

TIE TO N.J.G.S. BENCH MARKS IN WHIPPANY

- MK 460 WHIPPANY, MORRIS CO. N.J. Top of southerly bolt at the southeast edge of the bed-plate of the southeast column of steel frame supporting water tank at Eden Mill.

 Elevation: 222.686 ft.
- MK 461 WHIPPANY, MORRIS CO. N.J. A cross on the outer corner at the east end of door sill of the west entrance on the north face of the Morristown and Eric RR Station.

 Elevation: 200.706 ft.
- MK 462 WHIPPANY, MORRIS CO. N.J. A cross on the outer corner at the east end of duestone door sill of entrance on the south face of the Whippany Public School, a red brick structure on the north side of the railroad about 350 yards east of the station.

 Elevation: 237.107 ft.

SECOND ORDER LEVELING

of

UNITED STATES COAST & GEODETIC SURVEY

DESCRIPTIONS AND ELEVATIONS

OF

BENCH MARKS

IN

THE VICINITY OF THE ESSEX - PASSAIC LEVEL NET

SECOND-ORDER LEVELING

U. S. COAST & GEODETIC SURVEY

- FROM PORTLAND PA., EASTERLY AND SOUTHEASTERLY TO NEWARK, R.J.
- Y-18 CHESTER JUNCTION MORBIS COUNTY. On the D.L.AW. R.R. at the southeast mingwall of a concrete culvert, 5.9 miles east of the junction of the D.L.AM. R.R. and the Central R.R. in Chester Junction. It is located 200, ft. west of branch track to Rockaway, and 50. ft. east of a trolley line pole. A stand-A standard disk, set in a culvert wingwall stamped "Y-18, 1935". Elevation: 551.095 ft.
- ROCKAWAY 1935 ROCKAWAY, MORRIS COUNTY. At the City Building, 1 block north of the Central R.R., at the door leading "City Clerk Upstairs". It is located at the southeast corner of the building, on a concrete footing. A standard disk set in a concrete footing, stamped "Rockaway, 1935".

 Elevation: 533.677 rt.
- CHISELED SQUARE MORRISTOWN, MORRIS COUNTY. On the D.L.&W. R.R. tracks to Morristown, 6.5 miles north of the Morris St. underpass in Morristown. It is located in the corner of the concrete footing of signal mast #M-352, on the opposite side from the signal lights, in the trolley line. A chiseled square cut in a concrete footing.

Elevation: 527.210 ft.

- Z-18 MORRISTOWN, MORRIS COUNTY. At Denville, on the D.L.&W. R.R. 8.4 miles north of the Morris St. underpass in Morristown, and where the branch line takes off for Rocksway. It is located in the southwest corner on top of the wall supporting the over-pass for N.J. State Highway #5-N. A standard disk set in a concrete overpass stamped "Z-18, 1935". Elevation: 524.799 ft.
- A-20 MORRISTOWN, MORRIS COUNTY. On the D.L.&W. R.R. at an overpass for N.J. State Highway #10, 4.1 miles north of the Morris St. underpass in Morristown. It is located in the north end of the footing, south of the track. A standard disk set in a concrete bridge stamped "A-30, 1936". Elevation: 466.912 ft.
- COPPER HOLT (D.L.AW. R.R. B.M.) MORRISTONN, MORRIS COUNTY. 3.1 miles north of the Morris St. underpess in Morristown. It is located between 2 tracks, 3 3/4 poles south of Mile Post #33, in the center of a 3 inch square concrete post. A bronze disk set in a concrete post by the Delaware Lackswanns and Western Railroad. Elevation: 422,834 ft.

DESCRIPTIONS OF RENCH WARKS

SECOND-ORDER LEVELING

U.S. COAST AND GEODETIC SURVEY

FROM PORTLAND PA., EASTERLY AND SOUTHEASTERLY TO NEWARK, N.J.

- MORRIS PLAINS, 1935 MORRISTOWN, MORRIS COUNTY, N.J. 2.0 miles north of the Morris St. underpass of the D.L.&V. RR in Morristown. It is located in the moutheast corner of the Morris Plains School Yard, 34. ft. west of the centerline of Speedwell Ave. and 5. ft. west of the sidewalk. A standard disk set in a concrete fost stamped "Morris Plains 1935".

 Elevation: 399.015 ft.
- R R B M COPPER BOLT (D.L.&W. RR B.B.) MORRISTOWN, MORRIS CO. N.J. On the D.L.&W. R. 1.2 miles north of the Morris St. underpass of the D.L.&W. RR in Morristown. It is located directly between the tracks and 2 poles south of electric bridge #309. A bronze disk set in a 3# concrete post.

 Elevation: 349.419 ft.
- B-20 MORRISTOWN, MORRIS COUNTY N.J. At Morristown, in the north edge of town, in the northwest corner of the bridge on the D.L.&W. tracks. It is located 1000. ft. south of the power line house, and 5 rails north of M.P. #30. A standard disk set in concrete stamped *B-20 1935*.

 Elevation: 327.230 ft.
- MORRISTOWN 1935 MORRISTOWN, MORRIS CO., N.J. In Morristown, in a small park, It is located 800. ft. southwest of the D.L.&W. RR station and 50. ft. northwest of the Morris St. underpass. A standard disk set in concrete, stamped "Morristown 1935".

 Elevation: 327.322 ft.
- C-20 MORRISTOWN, MORPIS COUNTY N.J. On the D.L.&W. RR 2.0 miles southeast of the Morris St. underpass in Morristown. It is located at Convent Station at the grade crossing at the entrance to the College, in the concrete base of the electric alarm on the west side of the track 100. ft. east of the Post Office. A standard disk set in a concrete footing stamped "C-20, 1935".

 Elevation: 381.712 ft.
- D-20 MADISON, MORRIS COUNTY, N.J. On the D.L.AW. RR at Madison, about 0.7 mile north of the station at the first highway underpass. It is located in the northwest corner of the second underpass, north of the concrete foot walk over the tracks. A standard disk set in a concrete bridge stamped *D-20, 1935*.

Elevation: 281.994 ft.

DESCRIPTIONS OF BENCH MARKS

SECOND-ORDER LEVELING

U. S. COAST & GEODETIC SURVEY

- FROM PORTLAND PA., EASTERLY AND SOUTHEASTERLY TO HEWARK, H.J.
- GRISELED GROSS (275.82 D.L.AW. RR B.W.) MADISON, MORRIS COUNTY, W.J. At Madison, on the D.L.AW. RR, 0.4 miles north of the D.L.AW. RR Station, in the second post east of the northwest end of the underpass. It is located 20. ft. south of the north end and 8 ft. west of the centerline of the eastbound traffic. A chiseled square out in an underpass.

 Elevation: 276.010 ft.
- CHISELED CROSS (281.04) WADISON, MORRIS COUNTY, N.J. At Wadison, 200. ft. south of the D.L.AW. RR Station. It is located in the top of the southwest corner of the southwest wingwall of a concrete underpass. A chiseled cross cut in a wingwall. Elevation: 261.240 ft.
- CHISELED SQUARE MADISON, HORRIS COUNTY, N.J. On the D.L.&W. RR O.2 miles southeast of the D.L.&W. RR Station at Madison. It is located in the northeast corner of the concrete base of an electric bridge support, 3½ poles west of the highway overpass, and 5 poles east of signal # N-247. A chiseled square out in a bridge support.

 Elevation: 259.455 ft.
- CHATHAM 1935 CHATHAM, MORRIS COUNTY, N.J. In Chatham, on the line between the school property and the railroad property, 240 ft. south of the D.L.W. RR Station. It is located 230. ft. west of the center line of the tracks, and 30. ft. east of the centerline of the driveway to the school building. A standard disk, set in concrete, enclosed by an iron pipe, stamped "Chatham 1935".

 Elevation: 244,494 ft.
- E-30 CHATHAM, MORRIS COUNTY, N.I. On the D.L.AW. RR, in the south part of the city, at a freight station. It is located in the top of the concrete, level with the track, in a culvert and headwall with stairs, west of the south end of the freight station on a high grade electric line, 9 rails north of mile-post #23. A standard disk set in a concrete bridge stamped "E-20, 1935".

 Elevation: 244.294 ft.

SECOND-ORDER LEVELING

U. S. COAST & GEODETIC SURVEY

- FROM PORTLAND PA., EASTERLY AND SOUTHEASTERLY TO NEWARK, N. J.
- CHISELED CROSS CHATHAN, MORRIS COUNTY, N.J. In Chatham, in the top of the southwest abutment of the highway underpass. It is located 750. It. southeast of the D.L.&W. RR station at Chatham. A chiseled cross cut in the highway underpass.

Elevation: 244.619 ft.

- RV CHATHAM, MORRIS COUNTY, N.J. In Chatham, in the southwest abutment of a highway underpass. It is located 0.3 mile south of mile post #23 on the D.L.&W. RR about 3. ft. below the level of the tracks. A standard monel metal rivet, set in an underpass, by the D.L.&W. RR. Elevation: 237.946 ft.
- RR B.M.- 262.83 (CHISELED CROSS) CHATHAM, MORRIS COUNTY, N.J. In Chatham, about 1.5 miles southeast of the D.L.&W. RR Station. It is located in the center span of the D.L.&W. RR Bridge, 0.25 miles east of mile post #22. A chiseled cross cut in a concrete bridge span.

 Elevation: 263.169 ft.
- SUMMIT, 1935 SUMMIT, UNION COUNTY, N.J. At Summit High School, Morris Ave. between Maple Street and Elm St. Southeast end of second step at main entrance. A standard disk, set in concrete step, stamped "Summit, 1935".

 Elevation: 384.606 ft.
- RRBM COPPER BOLT SUMMIT, UNION COUNTY, N.J. In signal tower #M198. 20 ft. southeast of centerline of D.L.&W. RR east main track. A copper bolt set in signal base. Elevation: 362.939 ft.
- F-20 SUMMIT, UNION COUNTY, N.J. In east part of town on D.L.&W
 RR underpass for street, on south Springfield Ave. at southwest corner in top of concrete blook. A standard disk set
 in concrete, stamped "F-20".

 Elevation: 325,705 ft.
- G-20 MILLBURN, ESSEX COUNTY, N.J. On D.L.&W. RR at underpass one block north of city center and traffic light. At millburn Coal & Ice Co. in southeast corner at end of banister.

 1000 ft. west of station. Mile Post 17. A standard disk, set in concrete, stamped "G-20, 1935".

 Elevation: 164.534 ft.

SECOND - ORDER LEVELING

U. S. COAST AND GEODETIC SURVEY

- UBCAGS & SS 501 MILLBURN, ESSEX COUNTY, N.J. On Millburn Ave. at its intersection with Walnut Ave. It is located in the northeast corner of the island. Millburn Township. The monument is 3.55 ft. southwest of a cross cut in sidewalk, 1.46 ft. northwest of monel metal rivet set in southeast curb. A bronze disk, set in concrete post.

 Elevation: 139.980 ft.
- H-20 MAPLEWOOD, UNION COUNTY, N.J. On the D.L.&W. RR at Baker St. underpass .2 ft. west of station. A standard disk set in concrete, stamped "H-20, 1935".

 Klevation: 135.504 ft.
- J-20 SOUTH ORANGE, ESSEX COUNTY, N.J. On the D.L.&W. RR at atreet underpass on Heade St. at southeast corner on topping block back of banister. A standard disk, set in concrete, stamped "J-20, 1935".

 Elevation: 156.912 ft.
- E-20 ORANGE, ESSEX COUNTY, N.J. At Hyland Ave. Station first underpass west of. On D.L.&w. RR located in southwest corner, back of west end of banister. A standard disk set in concrete, stamped "K-20, 1935".

 Elevation: 196.758 ft.
- CHISELED CROSS ORANGE, ESSEX COUNTY, N.J. 500 ft. west of D.L.&W.
 RR Station at Highland Ave. In southwest wingwall at underpass. 6 ft. south of centerline of east bound track. A
 chiseled cross cut in wingwall of underpass.
 Elevation: 197.716 ft.
- L-20 ORANGE, EBSEX COUNTY, N.J. On D.L.&W. RR tracks in street underpass north of station. In northeast corner of concrete west side, of banister opposite freight house. A standard disk, set in concrete, stamped "L-20, 1935".

 Elevation: 204.294 ft.
- MON. 403 ORANGE, ESSEX COUNTY, N.J. On the southeast corner of Park Ave. and North Day St. It is located 15.62 ft. east of east curbline of N. Day St. and 10.66 ft. south of south curb line of Park Ave. and is set 2 inches below the ground.

The monument is 9.72 ft. southeast from crowfoot in easterly of two iron guard-posts and 9.18 ft. southeast from crowfoot in westerly iron guardpost. A standard State Survey disk set in concrete, stamped #403#.

Elevation: 181.460 ft.

SECOND - ORDER LEVELING

U. S. COAST AND GEODETIC SURVEY

MON. 402 - GRANGE, ESSEX COUNTY, N.J. On south side of Park Ave., between Chapel St. and High St. It is located 233 ft. east of east curb line of Chapel St. and 292 ft. west of west curb line of High St. and 1s set 2 inches below the ground.

The monument is 5.48 ft. south of south curb line of Park Ave., 16.60 ft. north of concrete wall and iron fence of St. John's Cemetery, 29.77 ft. from northwest corner of Annie Manahan's store and 19.98 ft. from northeast corner of Sylvanus Shaw's store. A standard state survey disk set in concrete, stamped "402".

Elevation: 211.683 ft.

M-20 - EAST ORANGE, ESSEX COUNTY. On D.L.&W. RF track first underpass south of East Orange Station. Signal NoW93.

Norton K.P.E. Street and Davis Pike, at northeast corner.

A standard state survey disk set in concrete, stamped "M-20, 1935".

Elevation: 183.878 ft.

- N-20 NEWARK, ESSEX COUNTY, N.J. At first underpass (High St.)
 north of Station D.L.&W. RR. At southeast corner of
 steel bridge, top of concrete footing on west wall of
 stairs. A standard disk, set in concrete footing.
 Stamped *N-20, 1935*.
 Elevation: 63.645 ft.
- CHISELED SQUARE NEWARK, ESSEX COUNTY. At first street underpass north of station of D.L.&W. RR. At northeast corner of footing for steel bridge opposite end of bridge from N-20. A chiseled square in concrete.

 Elevation: 63.563 ft.

FIRST ORDER LEVELING

OF

UNITED STATES COAST & GEODETIC SURVEY

DESCRIPTIONS AND ELEVATIONS

OF

BENCH MARKS

IN

THE VICINITY OF THE ESSEX - PASSAIC LEVEL NET

U.S.C.& G.S. Princeton, N.J.

- RV 5.—At <u>Linden</u>, Union County, at the southeast corner of the intersection of St. George St. and Park Ave., 45 feet south of the center of St. George St., 25 feet east of the center of Park Ave., and in the top of the stone curb. A standard monel-metal rivet. (15.476 meters or 50.774 feet.)
- J 11.—At Flissbeth, Union County, on Rahway Avenue, between Newcomb Pl. and Clover St. 30 feet north of the center of the avenue, in the front face of a white brick building, 50 feet east of the west end, and 4 feet higher than the sidewalk. A standard disk, stamped "J 11 1933" and set vertically. (15.182 meters or 49.810 feet.)
- K 11.—At Elizabeth, Union County, on Rahway Avenue, at the north end of Burnet St., about 450 feet west of the county courthouse, 25 feet north of the center of the avenue, in the south face of the northeast wing wall of the masonry underpass of the Pennsylvania Railroad, and 4 feet higher than the sidewalk. A standard disk, stamped "K 11 1933" and set vertically. (6.150 meters or 20.177 feet.)
- L 11.—At Elizabeth, Union County, at the St. George St. entrance to the county courtbouse, 48 feet north of the center of Rahway Avenue, at the east end of the steps, and in the top of the stone coping, 3 feet higher than the sidewalk. A standard disk, stamped "L 11 1933". (5.884 meters or 19.304 ft.)
- 30.44 (N.J.G.S.).—At <u>Elizabeth</u>, Union County, about 100 feet northwest of the Main Street entrance to the county courthouse, at the front entrance to the old First Presbyterian Church, and on the top of the southeast end of the top stone step, 3.5 feet above the ground. A chiseled square. (9.372 meters or 30.745 feet.)
- DOCK.—At Elizabethport, Union County, at Moore's Dock, about 300 feet south of the Moore plant of the Bethlehem Steel Co., and in the southwest corner of the dook, 2 feet southwest of a niggerhead. A standard disk, stamped "DOCK 1933". (2.636 meters or 8.655 feet.)
- Tidal 6.--At Elizabethport, Union County, at the Moore plant of the Bethlehem Shipbuilding Corp., at the Front Street side of the machine shop, 77 feet south of the northeast corner of the building, and in the concrete sill of the north door. A standard disk, stamped "6/1923". (3.977 meters or 13.048 feet.)
- fidal 8.—At Elizabethport, Union County, at the Moore plant of the Bethlehem Shipbuilding Gorp., at the rear of the new office building, between a concrete incline and the fire escape, and in the concrete sill of a cellar window. A standard disk, stamped "5/1923". (5.336 meters or 17.507 feet.)
- SAM.—At Elizabethport, Union County, on Front Street, at the Hartol Terminal Corp., in the north face of the comprete wall inclosure, at the northwest corner of the inclosure, and 5 feet higher than the ground. A standard disk, stamped "SAM 1933" and set vertically. (5.090 meters or 16.699 feet.)
- Mil.—At Elizabeth, Union County, on Borth Broad St. at the Pennsylvania Bailroad overhead crossing, 60 feet northwest of the Baltimore & Ohio Railroad overhead crossing, 39 feet southwest of the center of Borth Broad St. in the southwest backwall of the masonry underpass, and 3 feet higher than the sidswalk. A standard disk, stamped "Mil 1933" and set vertically. (6.345 meters or 20.517 feet.)

- 19 (P.R.R.).—At Elizabeth, Union County, on the Pennsylvania Railroad, at the bridge over the tracks of the Central Railroad of New Jersey, in the top of the northeast corner of the east abutment, 4 feet north of the morth rail, and level with the base of the rail. A copper bolt. (14.452 meters or 47.415 feet.)
- N 11.—At Elizabeth, Union County, at the northeast side of the post office, 90 feet southwest of the center of Broad Street, at the front of the building, 12 feet north of the center of the south entrance, and in the top of the stone ledge, 4 feet above the ground. A standard disk, stamped N 11 1933. (11.480 meters or 37.664 feet.)
- ELIZABETH.—At Elizabeth, Union County, in the middle of a triangle formed by the intersection of Broad Street, Westminster Avenue and Prince Street, at the northeast corner of a monument, and in the top of the bottom step. A standard disk, stamped "ELIZABETH 1933". (10.114 meters or 33.182 feet.)
- RY 9.—At <u>Elizabeth</u>, Union County, on Newark Avenue, at the intersection of Broad Street, about 200 yards north of the Minfield Scott Botel, about 150 feet south of the Alfred Forst service station, 35 feet south of the center line of Newark Avenue, and in the south curb. A standard monel-metal rivet. (8.213 meters or 26.945 feet.)
- RV 10.—At Elizabeth, Union County, on Newark Avenue, about 1000 feet southwest of the southwestern city limits of Newark, Essex County, about 100 feet north of the northern corner of Big Bear Market, 33 feet northwest of the center line of Newark Avenue, and in the top of the stone curb. A standard monel-metal rivet. (8.317 meters or 27.287 feet.)
- P 11.—At Mewark, Essex County, on State Highway 27, at the junction of Lowell Place and Frelinghuysen Avenue, about 800 feet southeast along Frelinghuysen Avenue from Haynes Avenue, at 646-680 Frelinghuysen Avenue 15 feet east of the east curb line in the northwest corner of the concrete structure of the Oxweld Acetylene Corp., and 5 feet higher than the level of the curb. A standard disk, stamped "P 11 1933" and set vertically. (6.931 meters or 22.739 feet.)
- 12.65 (N.J.G.S.)=33 (Oity of Newark).—At Newark, Essex County, at the northeast corner of the intersection of Frelinghuysen Avenue and Fenwick Street, at the Fenwick Street entrance to fire department engine house 19, and on the cast end of the doorsill. A chiseled cross. (3.904 meters or 12.806 feet.)
- Q 11.—At Newark, Essex County, on Frelinghuysen Avenue, about 160 feet south of W. Peddie Street, about 160 feet north of Lidgerwood Place, at the Lehigh Valley Railroad overhead crossing, in the south end of the concrete pier, at the center of the avenue, and 5 feet higher than the elevation of the finished grade. A standard disk, stamped "Q 11 1933". (4.762 meters or 15.623 feet.)
- R 11.—At Newark, Essex County, at the southwest dorner of the intersection of Frelinghuysen Avenue and Concord Street, 1 block north of the Lehigb Valley Railroad overhead bridge, 16 feet west of the Frelinghuysen Avenue curb line, 13 feet south of the Concord Street curb line, in the northeast corner of a 3-story brick building owned by Lichtman & Son and built in 1906, and 5½ feet higher than the west curb. A standard disk, stamped "R 11 1933" and set vertically. (4.534 meters or 15.860 feet.)

- S 11.—At Newark, Essex County, at the intersection of Pointer and West N.J.R.R. Streets, 1 block south of Vanderpool Street, on the east side of West N.J.R.R. Street, in the stone masonry retaining wall, and 4 feet higher than the east curb. A standard disk, stamped "3 11 1933" and set vertically. (3.997 meters or 13.113 feet.)
- 15 B (P.R.R.) -- At Newark, Essex County, on the Pennsylvania Railroad, at the bridge over Vanderpool Street, 5 feet north of the north rail, and on the northwest bridge seat, 3 feet below the base of the rail. A chiseled square. (5.906 meters or 19.377 feet.)
- 15 A (P.R.R.)-At Newark, Essex County, on the Pennsylvania Railroad, at the bridge over South Street, the first bridge east of the South Street station, 5 feet north of the north rail, and on the northeast bridge seat, 3 feet below the base of the rail. A chiseled square. (8.190 meters or 26.870 feet.)
- 15 (P.R.R.)--At <u>Newark</u>, Essex County, on the Fennsylvania Railroad, at the bridge over East Kinney Street, 5 feet south of the south rail, and on the southeast bridge seat, 3 feet below the base of the rail. A chiseled square. (8.328 meters or 27.316 feet.)
- 84 (City of Newark) -- At Newark, Essex County, about 1 block south of the Miller Street-Pennsylvania Railroad underpass, about 106 feet east of the east building line of Broad Street, 11 feet south of the south curb of Miller Street, and on the concrete wall sill, 3 feet higher than the sidewalk. A chiseled cross. (4.870 meters or 15.978 feet.)
- 83 (City of Newark) -- At Newark, Essex County, about 1 block west of the Miller Street-Pennsylvania Railroad underpass, 50 feet east of the Broad Street building line along Miller Street, 11 feet north of the north ourbline of Miller Street, and on the top stone step of a 3-story frame building, 2 feet higher than the sidewalk. A chiseled square. (4.543 meters or 14.905 feet.)
- T 11 -- At Newark, Essex County, at the intersection of Broad and Green Streets, 60 feet east of the east curb of Broad Street, 30 feet south of the south curb of Green Street, in the northwest corner of the city hall, and 4 feet higher than the curb. A standard disk, stamped "T 11 1933" and set vertically. (10.154 meters or 33.314 feet.)
- 41.68 (N.J.G.S.) = 36 (City of Newark) -- At Newark, Essex County, on Broad Street, at the city hall, 19 feet south of the south edge of the south entrance, about 13.5 feet above the level of the street, 10 inches north of the junction of the south stone balustrade with the building, and on the water table. A chiseled cross. (12.808 meters or 42.021 feet.)
- 30.17 (C.R.R.N.J.) -- At Newark, Essex County, and at the northwest corner of the intersection of William and Broad Streets. The top nut of the fire hydrant. (10.034 meters or 32.920 feet.)
- 31.71 (C.R.R.N.J.) -- At <u>Hewark</u>, Essex County, and at the southeast corner of the intersection of Broad and Mechanic Streets. The top nut of the high-pressure hydrant. (10.632 meters or 34.882 faet.)

- 31.75 (O. R. R. N.J.).—At Mewark, Essex County, on Lafayette Strebt, at the Central Railroad of New Jersey station, on the north building line of Lafayette Street, and in line with the west ourb of a driveway leading to the lower level of the Broad Street terminal. The top of a rounded wheel guard. (9.750 meters or 31.988 feet.)
- 41.333 (C.R.R.B.J.). —At Hewark, Essex County, in the passenger yards of the Central Railroad of New Jersey, 30 feet east of the bridge over Mulberry Street, and in the top of the northwest corner of relay box (MA 2.) The top of a bolt. (12.686 meters or 41.621 feet.)
- Ull.—At Bewark, Essex County, in Military Park, between Broad Street, Park Place and Center Street, about 100 feet north of the center line of Cedar Street, 30 feet east of the east curb of Broad Street, 42 feet north of a brass cannon, and in the top of the retaining wall of the subway entrance to the men's room, 2½ feet higher than the east curb of Broad Street. A standard disk, stamped "U 11 1933". (12.487 meters or 40.968 feet.)
- 38.47 (N.J.G.S.)=35 (City of Hewark).)-At Hewark, Essex County, at the northwest corner of the intersection of Academy and Broad Streets, at the Academy Street antrance to the post office, on the west end of the middle step of the three, d inches from the edge, 6 inches from the west wall, and 4 inches from the back wall. A chiseled cross, (11.522 meters or 38.766 feet.)
- 65.07 (H J.G.S.)=37 (City of Newark).—At Hewark, Essex County, at the High Street entrance to the county courthouse, at the north one of the two columns, and on the top of the northeast corner of the square marble base, A chiseled cross. (20.552 meters or 68.412 feet.)
- 132.93 (N.J.G.S.)=40 (City of Hewark),—At Hewark, Essex County, on the south side of Sussex Avenue between Jay and Hudson Breets, at the Jay Street entrance to the First Infantry Armory, on the south end of the brownstone doorsill, 2½ lundes from the south wall of the entrance, 8 inches from the door jamb, and 5 inches from the edge of the doorsill. A chiseled cross. (40.645 meters or 133.349 feet.)
- 117.61 (N.J.G.B.)*42 (City of Newark).—At Newark, Essex County, at the Bloomfield Avenue concrete bridge over a driveway and a stream in Branch Brook Perk, and at the middle of the south parapet of the bridge. The spex of a pointed concrete post. (35.948 meters or 117.939 feet.)
- 117.58 (N.J.G.S.) mh3 (City of Newark).—At Memark, Esser County, at the Bloomfield Avenue concrete bridge over a driveway and a stream in Branch Brook Park, and at the middle of the north marapet of the bridge. The apex of a pointed concrete post. (35.942 meters or 117.920 feet.)
- 95 (City of Newark).—At Newark, Essex County, at the southwest corner of the intersection of Mulberry and Commerce Streets, and on the corner of the stone water table of a brick building, 2 inches higher than the sidewalk. A notch, cut in the stone. (9.925 meters or 32.562 feet.)
- 96 (City of Newark).—At Hewark, Essex County, on the east side of Mulberry Street, between Canal and Commerce Streets, at the west end of Market Flaza, and on the top of the west granite coping of a circular tree bed, 3 feet higher than the finished grade of Mulberry Street. A chiseled cross within a chiseled square. (11.355 meters or 37.264 feet.)

Perth Amboy, 8.J., to Pert Jervis, B.Y.

- 97 (City of Newark).—At Newark, Essex County, at 76 Canal Street, at a 3 story brick building, and on the stone doorsil; 2 feet higher than the sidewalk. A chiseled Square. (11.739 meters or 36.514 feet.)
- 98 (City of Bewark).—At Bewark, Essex County, on Canal Street, at the Center Market Building, about 100 feet east of the northwest corner, and on the fifth granite pedestal, 10 inches higher than the sidewalk. A notch, out in the corner of the pedestal. (10.80% meters or 35.446 feet.)
- 90 (City of Newark).—At Newark, Essex County, at 96 Canal Street, 24 feet north of the center line of the street, and on the stone doorsill of a 3-story brick building, 30 inches higher than the sidewalk. A chiseled square. (11.289 meters or 37.037 feet.)
- 4 (City of Newark).—At Newark, Essex County, at the intersection of Ward and Canal Streets, and on the northwest corner of the Center Market building, 13 inches higher than the sidewalk. A notch, cut in the corner of the building. (10.040 meters or 32.940 feet.)
- 15 (City of Hewark). --At Newark, Essex County, opposite the city dock, 65 feet east of the center of the intersection of Canal and River Streets, 45 feet east of the corner of the 3-story brick building of the Public Service Company, and on the stone doorsill, 10 inches above the ground. A chiseled square. (3.511 meters or 12.503 feet.)
- V 11.-At Newark, Essex County, on Broad Street, midway between Division and Gross Streets, about 111 feet south of the south curb of Gross Street, about 100 feet south of the Delaware, Laokawanna & Western Railroad bridge over Broad Street, 18 feet east of the east curb of Bro d Street, and in the southwest corner of the 2-story brick freight station. A standard disk, stamped "V 11 1933" and set vertically. (11.886 meters or 38.996 feet.)
- 60.576 (D.L.& W.R.R.).—At Newark, Essex County, on the Delaware, Lackswamma & Western Railroad, on the north side of the station, and on the vest end of the stone doorsill of the west door, level with the track. A chiseled cross. (18.547 meters or 60.850 feet.)
- T. B. M. 7.—At Newark, Essex County, at the junction of Broad and Harvey Streets, at the south entrance to Mt. Pleasant Cemetery, 10 feet north of the north ourb of Hervey Street, on the stone retaining wall and foundation for an iron picket fence, and S inches higher than the sidewalk. A chiseled square. (19.069 meters or 62.562 feet.)
- RV 11.--At Newark, Essex County, at the junction of Broadway and Elwood Streets, at 637-643 Broadway, 25 feet east of the east curb of Broadway, in the southwest ourb of the private driveway to the residences, and 2½ feet higher than the street curb. A standard monel-metal rivet. (22.124 meters or 72.565 feet.)
- Will.—At Newark, Essex County, on Broadway, midway between Verona and Sylvan Avenuse, at the Eric Railroad overhead crossing, in the northwest corner of the west abutment, 18 feet west of the west curb of Broadway, and 5 feet higher than the top of the curb. A standard disk, stamped "Willess". (14.869 meters or 48.783 feet.)

- 32.97 (N.J.G.S.) al (Oities of Belleville and Sewark).—At Sewark, Resex County, on Broadway, about 10 feet south of the Belleville city limit, at the south end of the west perapet of the bridge over Becomd River, east of an iron fence, and nearly in the center of the first coping stone. A chiseled cross. (10.146 meters or 33.287 feet.)
- I 11.—At Belleville, Esser County, about 300 feet south of the Cleveland station of the Eris Hallroad, about 301 feet south of Mills Street, about 250 feet of Broadway, 24 feet west of the northeast corner of the Essex Wire cloth Manufacturing Co. building, and in the top of the southwest corner of the concrete abutment of the steel railroad bridge over Mills Street. A standard disk, stamped "I 11 1933". (5.405 meters or 17.745 feet.)
- BELLEVILLE. —At Belleville, Esser County, about 150 feet southwest of the concrete balance weight of a drawbridge, 33 feet southeast of the main entrance to the Dutch Reformed Church, 16 feet west of the west curb of Main Street, and 6 inches higher than the aldewalk. A standard disk, stamped "BELLEVILLE 1933" and set in the top of a concrete post. (3.461 meters or 11.421 feet.)
- E.J. (H.J.H.D.).—At <u>Belleville</u>, Essex Jounty, about 150 feet southwest of the concrete balance weight of a drawbridge, 32 feet southeast of the main entrance to the Dutch Reformed Church, 20 feet west of the west ourb of Main Street, and 6 inches higher than the sidewalk. A New Jarsey Highway Department standard disk, stamped "K.J." and set in the top of a concrete post. (3.602 meters or 11.518 feet.)
- RY 12.—At Borth Arlington, Bergen County, at the junction of Arlington Sculevard and River Road, about 3,500 feet north of the Belleville Avenue bridge over Passaic River, at the high-water mark on the cast bank of the river, 75 feet east of the low-water mark, on the south side of the boulevard, at a concrete culvert, in the top of the west headwall, and 2 feet south of the north end. A standard monel-metal rivet. (2.378 meters or 7.502 feet.)
- RV 13. —At Morth Arlington, Bergen County, on River Road, about 160 feet south of the Lyndhurst township line, 55 feet south of the junction of River Road and Jaunesy Avenue, 5 feet south of a drop inlet, and in the top of the west ourb of River Road, level with the finished grade of the road. A standard monel-metal rivet. (4.512 meters or 15.757 feet.)
- Il.—At Lyndburst, Bergen County, at the intersection of Stuyvesant and Kingsland Avenues, about 300 feet east of the center line of Kingsland Avenue about 75 feet south of the center line of Stuyvesant Avenue, at the northeast corner of Roosevelt School, in the north face, and 2 feet higher than the ground. A standard disk, stamped "Y 11 1933" and set vertically. (13.422 meters or 44.035 feet.)
- Ill.-At Lyndhurst, Bergen County, at the southwest corner of the intersection of Stuyvesent Avenue and Fern Street, about 156 feet west of the center line of Fern Street, 56 feet south of the center line of Stuyvesent Avenue, at the northwest corner of Franklin School, in the north face of the building, and & feet higher than the ground. A standard disk, stamped "I 1933" and set vertically. (19.655 meters or 64.583 feet.)
- A 12.--At Lyndhurst, Bergen County, at the intersection of Park and Court Avenue, 93 feet east of the center of Court Avenue, 27 feet south of the center of Park Avenue, at the Delaware Lackawanna & Western Railroad bridge over Park Avenue, and in the south masonry back wall, 4 feet higher than the side walk. A standard disk, stamped "Al2 1933". (8.241 meters or 27.037 feet.)

- 35.317 (D.L.& W.R.R.).—At Lyndhurst, Bergen County, at the intersection of Stuyvesent and Court Avenues, about 50 yards west of the Delaware, Lackawanna & Western Railroad station, at the west end of the overhead bridge, 16% feet north of the south rail of track 1, and ou the top of the north stone backwell of the west abutment. A chiseled cross. (11.757 meters or 35.573 feet.)
- mast (U.S.E.) = 38,865 (D.L.d W.R.R.). At Lyndhurst, Bergen County, on the Delaware, Lackawanna & Western Railroad, about 0.2 mile west of the station, at the east end of the bridge over Passaic River, 8.5 feet north of the center line of track 1, and in the top of the north capetone of the east abutment, at the track level. A 1-inch round dasting, lettered "U.S.E.D. H.L. STA." (11.930 meters or 39.140 feet.)
- West (U.S.E.).—At Lyndhurst, Bergen County, on the Delsware, Lackawanna & Western Railroad, about (U.) mile west of the station, at the west end of the bridge over Passaic River, and in the top of the south capstone of the west abutment, at the track level. A 1-inch round casting, lettered "U.S.E.D. H.L. STA." (11.468 meters or 37.625 feet.)
- 37 (1).-At Lyndhurst, Bergen County, on the Delsware, Lackswanns & Western Railroad, about 0.7 mile west of the station, at the west end of the bridge over Passaic River, and on the top of the north capstone of the west abutment, at the track level. A chiseled cross. (11.371 meters or 37.306 feet.)
- RV 14.—At Rutherford, Bergen County, at the northeast corner of the intersection of Van Ness and Park Avenue, 50 feet southwest of the south west corner of the residence at 338 Park Avenue, 27 feet east of the center line of Van Ness Avenue, 24 feet north of the center line of Park Avenue, and in the top of the concrete curb. A standard monel-metal rivet. (23.762 meters or 77.959 feet.)
- B 12.—At Rutherford, Bergen County, at the intersection of Park Avenue and Ridge Road, 60 feet south of the center line of Park Avenue, in the east end of the First Presbyterian Church, 21 feet north of the east entrance, and 2 feet higher than the ground. A standard disk, stamped *B 12 1953* and set vertically, (29.726 meters or 97.526 feet.)
- o 12.—At <u>Rutherford</u>, Bergen County, at the east end of Park Avenue, at the north end of Orient Street, about 100 yards east of the Rutherford Mational Bank, in the west face of the Eric Railroad station, and 5 feet higher than the sidewalk. A standard disk, stamped "C 11 1933" and set vertically. (14.572 meters or 47.505 feet.)
- 43.14 (N.J.G.S.)=1 (City of Rutherford). —At Rutherford, Bergen County, at the east end of Park Avenue, at the north end of Orient Street, about 100 yards east of the Rutherford Mational Bank, at the south side of the Eric Railroad station, and on the dor step, 1 foot higher than the sidewalk. A chiseled cross. (13.194 meters or 43.257 feet.)
- D 12.—At Rutherford, Bergen County, on Eric Street, about 225 feet northwest of the center line of Mackensack Street, about 150 feet south of the Eric Railroad station, 33 feet east of the center line of Eric Street, in the masonry retaining wall of the railroad, and 4.5 feet above the ground. A standard disk, stamped "D 12 1933". (7.998 meters or 26.240 feet.)

- E 12.—At Carlstadt, Bergen County, on Hackensack Street, between Hoboken and Broad Streets, at the southeast end of Small Street, 30 feet southeast of the center of Hackensack Street, in the front of the Carlstadt Hational Bank and in the top of a stone ledge, 2.5 feet higher than the sidewalk. A standard disk, stamped "E 12 1933." (28.750 meters or 94.422 feet.)
- RV 1 .—At Woodridge, Bergen County, at the intersection of Hackensack and Centre Streets, about 400 feet west of Woodridge School 1, 25 feet west of the center line of Centre Street, 18 feet north of the center line of Hackensack Street, and in the top of the concrete curb. A standard monel-metal rivet. (58.620 meters or 192.322 feet.)
- 182 (?).—At Soodridge, Bergen County, at the southwest corner of the intersection of Union Avenue and Hackensack Street, at the Hackensack Street entrance to public school 1, and on the top surface of the lowest concrete step. A chiseled cross. (55.369 meters or 181.656 feet.)
- 135.12 (N.J.G.S.).—At Woodridge, Bergen County, at the southwest corner of the intersection of Union Avenue and Hackensack Street, on the Hackensack Street side of public school 1, and on the top surface of the south basement windowsill, S feet higher than the street level and 2 feet higher than the ground. A chiseled cross. (57.453 meters or 185.494 feet.)
- F 12. --At Woodridge, Bergen County, at the intersection of Hackensack Street and Marlboro Avenue, about 105 feet south of the center of Hackensack Street, in the north face of public school 2, 15 feet west of the center of the main entrance, and 4 feet higher than the concrete porch. A standard disk, stamped "F 12 1933" and set vertically. (42.726 meters or 140.177 feet.)
- RV 16.—At Hasbrouck Heights, Bergen County, at the northeast corner of the intersection of Terrace Avenue and Henry Street, about 100 feet northeast of the corner of the Catheart Gardens Apartments, 36 feet east of the center line of Terrace Avenue, 30 feet north of the center line of Henry Street, and in the top of the concrets ourb. A standard monel-metal rivet. (38.843 meters or 127.437 feet)
- RV 17.—At Hasbrouck Heights, Bergen County, at the intersection of Terrace Avenue and Madison Street, 70 feet southeast of the southeast corner of residence at 329 Madison Street, 30 feet west of the center of Terrace Avenue, 18 feet north of the center line of Madison Street, and in the top of the concrete curb. A standard monetheal rivet. (30.313 meters or 99.452 feet.)
- G 12.—At Hasbrouck Heights, Bergen County, on Terrace Avenue, about 150 yards west of the city limits of Hackensack, 25 feet south of the center line of Terrace Avenue, at the undercrossing of State Highway 2, and in the top of the east end of the south baluatrade, 4 feet higher than the sidwalk. A standard disk, stamped "G 12 1933." (14.660 meters or 45.097 feet.)
- RV 18.—At Backensack, Bergen County, at the intersection of Polifly and Essex Streets, about 110 feet southeast of the southeast corner of the residence at 9 Polifly Street, 42 feet west of the center line of Essex Street, 30 feet north of the center line of Polifly Street, 12 feet east of the traffic-signal post controlling westbound traffic, and in the top of the concrete curb. A standard monel-metal rivet. (9.167 meters or 30.141 feet.)

perth Amboy, N.J., to Port Jervis, N.Y.

- H 12.—At Hackensack, Bergen County, at the intersection of First and Beach Streets, at the high school, 108 feet north of the center line of First Street, 66 feet west of the center line of Beech Street, in the west face of the building at the southwest corner, and 5 feet higher than the ground. A standard disk, stamped "H 12 1933" and set vertically. (5.072 meters or 26.483 feet.)
- J 12.—At Backensack, Bergen County, on First Street, about 600 feet east of the high school, 30 feet south of the center line of First Street, at the New York, Susquehanna and Western Railroad overhead crossing, directly under the center of the track, and in the south masonry back wall of the underpass, 5 feet higher than the sidewalk. A standard disk, stamped "J 12 1933". (5.523 meters or 21.401 feet.)
- X 12.—At Hackensack, Bergen County, at the intersection of First and High Streets, at public school 5, 75 feet north of the center line of First Street, 54 feet west of the center line of High Street, in the south face of the building at the southeast corner, and 5 feet higher than the ground. A standard disk, stamped "K 12 1933" and set vertically. (7.755 meters or 25.443 feet.)
- RV 19.--At Backensack, Bergen County, at the intersection of First Street and Fassaic Avenue, 36 feet south of the center line of First Street, 26 feet west of the center line of Passaic Avenue, and in the northeast corner of a raised concrete triangle in front of a Gulé filling station, 1 foot higher than the sidewalk. A standard mone-metal rivet. (6.643 meters or 21.795 feet.)
- 22.70 (B.J.G.S.)—At <u>Hackensack</u>, Bergen County, near the corner of Linden and Anderson Streets, west of the Anderson Street station, on the north side of Anderson Street, at the entrance to the apartments of a brick building erected in 1894 by G. A. Mattjetschenk and which also houses a general store, and on the west end of the doorsill. A chiseled cross. (6.946 meters or 22.789 feet.)
- RV 20.-At Maywood, Bergen County, on Passaic Avenue, at the north end of Esplande Place, at the Maywood-Eackensadk city line, 30 feet north of the center line of Passaic Avenue, and in the top of the west end of the concrete coping of a culvert, level with the sidewalk. A standard monel-metal rivet. (11.242 meters or 36.883 feet.)
- MAYNOOD.—At Maywood, Bergen County, at the borough hall on Park Avenue, 39 feet northeast of the center line of Park Avenue, and 3 feet southwest of a monument errected in memory of the World Wer dead, flush with the ground. A standard disk, stamped "MAYWOOD 1933" and set in the top of a concrete post. (28.724 meters or 94.239 feet.)
- L 12.--At Rowhelle Park, Bergen County, at the intersection of State Highway 2 and County Highway 62, 20 feet east of the center line of Highway 62, 15 feet below Highway 2, and in the north concrete back wall of the underpass, 5 feet higher than the sidewalk. A standard disk, stamped "L 12 1933." (19.232 meters or 63.097 feet.)
- RV 21.—At Rochelle Park, Bergen County, on County Highway 62, in front of the residence at 225 passaic Avenue, about 1 mile south of the Arcola swimming pool, 15 feet east of the center line of the highway, and in the top of the concrete curb. A standard monel-metal rivet. (14.596 meters or 47.687 feet.)

- M 12.—At Arcola, Bergen County, on County Highway 62, about 200 yards south of State Highway 4, 24 feet south of the center line of County Highway 62, and in the top of the east end of the south balustrade of the highway bridge over Saddle River, 4 feet higher than the sidewalk. A standard disk, stamped MM 12 1933. (16.701 meters or 54.793 feet.)
- N 12.—At Arcola, Bergen County, on State Highway 4, at the bridge over Saddle River, 45 feet north of the center line of the highway, and in the top of the east end of the north balustrade of the bridge, 4 feet higher than the sidewalk. A standard disk, stamped "N 12-1933." (17.785 meters or 58.350 feet.)
- RY 22.—At <u>Warren Point</u>, Bergen County, on State Highway 4, at a golf practice range, about 1,500 feet west of the highway bridge over Saddle River, 33 feet south of the center line of the highway, and in the top of the west concrete curb. A standard monel-metal rivet. (21.017 meters or 65.953 feet.)
- P 12.—At Warren Point, Bergen County, on State Highway 4, at the overhead crossing of the Frie Railroad, about 1,500 feet north of the post office, 33 feet east of the center line of the highway, and in the top of the south end of the east wing wall of the underpass, 2 feet higher than the sidewalk. A standard disk, stamped "P 12 1933." (17.754 meters 58.248 ft.)
- RV 23.—At Warren Point, Bergen County, at the intersection of State Highway 4 and Fifth Avenue, about 1 mile east of the Eric Railroad overhead crossing, 30 feet north of the center line of the highway, 15 feet west of the center line of Fifth Avenue, and in the top of the concrete curb. A standard monel-metal rivet. (21.703 meters or 71.204 feet.)
- Q 12.—At <u>Paterson</u>, Passaic County, on Brordway, at the concrete bridge over Passaic River, 45 feet north of the center line of the street, and in the top of the north end of the east concrete belustrade, 3.5 feet higher than the sidewalk. A standard disk, stamped "Q 12 1933." (16.758 meters or 54.980 feet.)
- l (City of Paterson).—At <u>Paterson</u>, Passaic County, at East Side Park, on Broadway, about 300 feet northwest of the concrete highway bridge over Passaic River, about 110 feet west of the center line of Broadway, and on the southeast corner of the concrete porch of the women's rest room, 1 foot higher than the ground. A chiseled square. (15.541 meters or 51.972 feet.)
- 2 (City of Paterson).—At Paterson, Passaic County, at the intersection of Broadway and Rast Thirty-ninth Streets at the crest of a long hill on Broadway, 27 feet east of the center line of Broadway, 18 feet north of the center line of East Thirty-ninth Streets and in the concrete sidewalk. A square-headed bolt. (38.402 meters or 125.991 feet.)
- RV 24.—At Paterson, Passaic County, at the intersection of Broadway and East Twenty-ninth Street, 33 feet east of the center line of East Twenty-Ninth Street, 24 feet south of the center line of Broadway, and in the top of the concrete foundation of a metal telephone pole. A standard monel-metal rivet. (23.197 meters or 76.105 feet.)
- RV 25.—At Paterson, Passaio County, at the intersection of Broadway and Graham Street at the Church of the Messiah, 13 feet southwest of the southwest curb of Broadway, and in the top of the southeast end of the bottom step of the entrance to the church, 1 foot higher than the sidewalk.
- A standard monel-metal rivet. (32.615 meters or 107.004 feet.)

-16-Perth Amboy, N. J., to Port Jarvie, H. I.

- R 18. -At Paterson, Passaie County, on Broadway, at the Eric Railroad overhead crossing, 36 feet south of the center line of the street, in the top of the south concrete back wall, 2 feet east of the west end, and 4.6 feet higher than the sidewalk. A standard disk, Stamped "R 12 1933." (23.878 meters or 78.340 feet.)
- 88.82 (H.J.G.S.). At Paterson, Passaic County, in front of the city hall, and on the northwest side of the main entrance, 1 foot southeast of the northwest door jamb. A chiseled cross. (27.045 meters or 88.730 feet)
- S 12.—At <u>Paterson</u>, Passaic County, On Hamilton Street, in the front face of the former post office building now used by the county, on the west side of the main entrance, and 2 feet higher than the stone porch. A standard disk, stamped "S 12 1933" and set vertically. (33.105 meters or 108.612 feet.)
- 103.18 (N.J.G.S.).—At <u>Paterson</u>, Passaic County, on Hamilton Street, at the main entrance to the county courthouse, directly across the street from the high school, and on the top of the stone coping at the north end of the steps. A chiseled cross. (31.422 meters or 103.090 feet.)
- T 12.--At Paterson, Passaic County, at the county courthouse on Hamilton Street, directly across the street from the high school, at the south end of the steps leading from the sidewalk to the courthouse porch, and in the stone pillar, 4.5 feet higher than the sidewalk. A standard disk, stamped "T 12 1933" and set vertically. (30.363 meters or 99.616 feet.)
- 99.45 (R.J.G.S.). -- At <u>Paterson</u>, Passaic County, at the southwest corner of Main and Slater Streets, at the St. Boniface Church, and on the south end of the Main Street entrance. A chiseled cross. [30,27] meters or 99.314 feet.]
- U 12. At Paterson, Passaic County, at the intersection of Grand and New Streets, at the city reservoir, 96 feet south of the center line of New Street, 36 feet east of the center line of Grand Street, and in the top of the Grand Street end of the reservoir, 1.5 feet higher than the ground. A standard disk, stamped "U 12 1933." (53.506 meters or 175.544 feet.)
- 188.28 (D.L.&w.R.R.). -- About 14 miles west along the Delaware, Lackwanna & Western Railroad from Paterson, Passaic County, about 1,000 feet east of the east end of the bridge over Passaic River, about 940 feet east of milepost 17, about 700 feet west of semaphore signal 167, 3 feet north of the north rail, and on the top of the east abutment of a small bridge, level with the base of the rail. A chiseled cross. (57.424 meters or 188.399 feet.)
- V 12. -- About 1½ miles west along the Delaware, Lackawanna & Western Railroad from Paterson, Passaic County, shout 50 feet west of milepost 17, in the top of the south end of the east abutment of the bridge over Passaic River, 12 feet south of the south rail, and I foot lower than the base of the rail. A standard disk, stamped "V 12 1933." (57.228 meters or 187.756 feet.)
- 188.4 (D.L.&W.R.R.). --About 1.6 miles west along the Delaware, Lack- awanna & Western Hailroad from Paterson, Passaic County, about 650 feet of west of milepost 17, and on the top of the north end of the west abutment of the bridge over Passaic River, 7 feet north of the north rail, and 1 foot lower than the base of the rail. A chiseled cross. (57.377 meters)

- RW 26 (D.L. & W.R.R.).—About 14 miles west along the Delaware, Lackswanna & Western Railroad from Paterson, Passaic County, about 1,600 feet west of milepost 17, about 1,000 feet west of the west end of the bridge over Passaic River, 6 feet north of the north rail, and in the top of the concrete base of automatic signal 175, 1 foot lower than the base of the rail. A standard monel-metal rivet. (55.554 meters or 192.106 feet.)
- W 12.—At Little Falls, Passaic County, on the Delaware, Lackawanna & Western Railroad, about 140 feet west of the station, at semaphore signal 183, and 7 feet south of the south rail, in the north face of the easterly pedestal of the concrete overhead highway crossing, 4 feet higher than the ground. A standard disk, stamped "W 12 1933" and set vertically. (59.495 meters or 195.193 feet.)
- 194.56 (R.J.G.S.).—At <u>Little Falls</u>, Passaic County, at the northeast corner of the Delsware, Lackawanna & Western Railroad station, and on the top of the stone water table. The point of a phiseled arrow. (59,287 meters or 194.511 feet.)
- RV 27 (D.L. & W.R.R.). -- About 0.6 mile west along the Delaware, Lackswanna & Western Railroad from the station at Little Falls, Passaic County, about 750 feet west of Milepost 19, 60 feet west of the center of a grade crossing, and 7 feet south of the south rail, in the concrete base of semaphore signal 194, level with the base of the reil. A standard monel-metal rivet. (56.834 meters or 186.463 feet.)
- 181.65 (D.L. & W.R.R.).—About } mile east along the Delaware, Lackswanna & Western Railroad from the station at Mountain View, Passaic County, about 205 feet west of milepost 20, about 200 yards northeast of the smokestack of an abundoned brick mill, 7 feet north of the north rail, and on the top of the concrete base of semaphore signal 201, level with the base of the rail. A chiseled cross. (55.322 meters or 181.502 feet.)
- 180.7 (N.J.G.S.).—At Mountain View, Passaic County, at the Delaware, Lackawanna & Western Railroad station, about 270 feet east of a grade crossing, at the south entrance to the station, and on the east end of the concrete doorsill. A chiseled cross. (55.068 meters or 180.669 feet.)
- T 12.—At Mountain View, Passaic County, on the Delaware, Lackawanna & Western Railroad, about 360 feet west of the station, 50 feet west of the center line of Preakness Avenue, 50 feet south of the south rail, and 1 foot lower than the base of the rail. A standard disk, stamped T 12 1933 and set in the top of a concrete post. (53.956 meters or 177.021 feet.)
- Z 12. At Mountain View, Passaic County, on the Delaware, Lackswanna & Western Railroad, about 2,200 fact west of the station, about 1,500 feet east of the Eric Räilroad crossing, in the top of the north concrete back wall of the overhead highway crossing, at a point where the wing wall joins the back wall, and 4 feet higher than the ground. A standard disk, stamped "Z 12 1933." (55.417 meters or 181.814 feet.)
- 173.666 (D.L. & W.R.R.).—At Mountain View, Passaic County, on the Belawame, Lackawanna & Western Railroad, at the overhead crossing of the State Highway 23, 75 feet south of the track, on the westernmost of three concrete supports forming the third line of supports of the overhead bridge, in the top of the projecting ledge of concrete, painted "Pl 2 173.666," & feet lower than the track, and 6 feet higher than the ground. A copper plug. (52.973 meters or 173.796 feet.)

-17-Perth Amboy, N. J., to Port Jervis, N. Y.

- 183.99 (D.L. & W.R.R.).--At Mountain View, Passaio County, on the Delaware, Lackawanna & Western Railroad, at the overhead crossing of State Highway 23, about 1,075 feet from the Erie Railroad crossing, about 925 feet west of the Delaware, Lackawanna & Western Railroad station, 24 feet south of the south rail of the south track, on the top of the spanner wall of a concrete pier, painted *183.99.* and 8 feet higher than the track level. A chiseled cross. (56.085) meters or 184.006 feet.)
- 25-A2 (D.L. & W.R.R.). -- At Mountain View, Passaic County, on the Delaware Lackawanna & Western Railroad, about 1,000 feet west of the concrete overhead highway bridge, about 200 feet east of the Exis Railroad crossing, 6 feet north of the north rail, and in the top of the north end of an abandoned concrete abutment, level with the base of the rail. A bolt. (54.239 meters or 177.949 feet.)
- I 12.-- At Mountain View, Passaic County, on the Eric Railroad, about 500 feet south of the Delaware, Lackawanna & Western Railroad crossing, about 220 feet north of a grade crossing, & feet west of the west rail, and on the top of the west end of an abandoned concrete abutment, 6 inches lower than the base of the rail. A standard disk, stamped "X 12 1933." (54.358 meters or 178.340 feet.)
- RV 28 (E.R.R.). At Mountain View, Passaic County, on the Eric Railroad, about 500 feet south of the Delaware, Lackswanna & Western Railroad crossing, about 220 feet north of a grade crossing, and 9 feet east of the east rail, in the top of the east end of an abandoned concrete abutment, 6 inches lower than the base of the rail. A standard monel-retal rivet. (54.372 meters or 178.385 feet.)
- RV 29 (E.R.R.).—At Mountain View, Passaic County, on the Greenwood Lake Division of the Eric Railroad, about 560 feet north of the Delaware, Lackawanna & Western Railroad crossing, 5 feet east of the east rail, and in the top of the northwest corner of the west abutment of bridge 21.75, 1 foot lower than the base of the rail. A standard monel-metal rivet. (53.329 meters or 174.964 feet.)
- RV 30 (E.R.R.).--At Mayne, Passaic County, on the Greenwood Lake Division of the Eric Railroad, about 120 feet south of the station, about 2,640 feet north of milepost 22, 20 feet east of the east face of a large brick building, 6 feet west of the west rail, and in the top of an abandoned concrete signal foundation, level with the base of the rail. A standard monel-metal rivet. (52.448 reters or 172.073 feet.)
- 175.63 (N.J.G.9.). -- About 1 mile north along the Greenwood Lake Division of the Eric Railroad from the station at Wayne, Passale County, and on the top of the east end of the south abutment of the bridge over Pompton River, 4.7 feet east of the east girder, and 5 feet lower than the base of the rail. A chiceled cross. (53.534 meters or 175.636 feet.)
- RV 31 (E.R.R.).--About 0.5 mile south along the Greenwood Late Division of the Eric Railroad from the station at Pequannock, Morris County, about 550 feet north, of milepost 23, at girder bridge 23.16, 2 feet east of the east rail, in the top of the southeast corner of the concrete stringer seet of the north abutment and 3 feet lower than the base of the rail. A standard monel-metal rivet. (54.065 meters or 177.378 feet.)

-18- Perth Amboy, N.J. to Port Jervis, N.Y.

- A 13.-At Pequannock, Morris County, on the Greenwood Lake Division of the Eric Rallroad, about 180 feet south of the station, 54 feet south of the center of the crossing of State Righway 25, 27 feet south of a watchman's shanty, and 16 feet west of the west rail. A standard disk, stamped *A 13 1933* and set in the top of a concrete post. (55.160 meters or 180.971 feet.)
- RV 32 (E.R.R.).—At Pequannock, Morris County, on the Greenwood Lake Division of the Eric Railroad, about 110 feet south of the station, about 100 feet north of milepost 24, 30 feet north of the center of the crossing of State Righway 23, 4 feet west of the west rail, in the top of the concrete station curb, 5 feet north of the south end, and 6 inches higher than the top of the rail. A standard monelmetal rivet. (55.363 meters or 181.637 feet.)
- RV 33 (E.R.R.).—About 0.5 mile north along the Greenwood Lake Division of the Eric Railroad from the station at Pequannook, Morris County, about 270 feet north of the first grade crossing north of the station, 9 feet east of the east rail, and level with the base of the rail. A standard monel-metal rivet. (55.702 meters or 162.749 feet.)
- B 13.- At Pospton Plains, Morris County, on the Greenwood Lake Division of the Eric Railroad, about 150 feet north of the station, 21 feet south of the center of a private grade orossing, 18 feet east of the east rail, and level with the track. A standard disk, stamped *B 13 1933* and set in the top of a concrete post. (55.971 meters or 193.474 feet.)
- RV 34 (I.R.R.).— At <u>Possition Plains</u>, Morris County, on the Greenwood Lake Division of the Eric Railroad, about 150 feet north of and across the track from the station, about 1.570 feet south of milepost 26, 5 feet east of the east rail, in the top of a concrete signal foundation, and level with the base of the rail. A standard monel-metal rivet. (55.548 meters or 193.070 feet.)
- RV 35 (E.R.R.). -- about 0.6 mile north along the Greenwood Lake Division of the Eric Railroad from the station at Pornton Plains, Norris County, about 180 feet north of a private grade orossing, about 100 feet north of milepost 26, 4 feet east of the east rail, in the top of the southeast corner of the east head wall of concrete flat-top bridge 2610, and 6 inches lower than the base of the rail. A standard monel-metal rivet. (59.119 meters or 193.960 feet.)
- RV 36 (E.R.R.).—at <u>Riverdale</u>, Morris County, on the Greenwood Lake Division of the Eric Railroad, 30 feet south of the center of a grade crossing, 15 feet north of milepost 27. 7 feet east of the east rail about 270 feet southwest of a large gravel plt, in the northwest corner of a signal foundation, and level with the base of the rail. A standard monel-metal rivet. (63.024 meters or 206.771 feet.)
- C 13.-At <u>Pompton</u>, Passaic County, on the Greenwood Lake Division of the Eric Railroad, about 200 feet south of the center of the Rasburg Street crossing, about 100 feet south of the station, about 100 feet east of the Pompton Feed Company's office, 30 feet west of the mest rail, and 6 inches higher than the ground. A standard disk, stamped "0 13 1933" and set in the top of a concrete post. (65.076 meters or 223.346 feet.)

<u>Pompton</u>, top of east rail of the Greenwood Lake Division of the Eric Railroad at the intersection of the prolongation of the south ourb of Hemburg Street. (223.3 feet.)

-19-Perth Amboy, S. J., to Port Jervis, B. Y.

- RV 37 (E.R.R.).--In Morris County, at <u>Postton Junction</u>, Passaic County, on the Greenwood Lake Division of the Frie Railroad, about 250 feet south of the New York, Susquehanns & Western Railroad crossing, 96 feet south of mileoest 28, 7 feet east of the east rail, and in the top of the southeast corner of the north abuttent of bridge 2785, 1 foot lower than the base of the rail. A standard monel metal rivet. (65.974 meters or 216.450 feet.)
- D 13.—At <u>Pompton Junction</u>, Passaic County, on the New York, Susquehanna & Western Railroad, about 200 feet south of the railroad crossing, about 120 feet west of a semanhore signal, 36 feet north of the north rail, and in the top of a large boulder, 2 feet lower than the base of the rail. A standard disk, stamped *D 13 1933.* (66.163 meters or 217.070 feet.)
- E 13.--At <u>Pompton Junction</u>, Passaic County, on the New York, Susquebanna & Western Railroad, about 250 feet west of the railroad crossing, about 170 feet west of a semaphore signal, 15 feet north of the north rail, and in the top of a large rock outcrop, 2 feet higher than the top of the rail. A standard disk, stamped "E 13 1933." (67.534 meters or 221.565 feet.)
- RV 38 (E.R.R.). -- about 3/4 mile west along the New York, Susquehanna & Western Railroad from <u>Pompton Junction</u>, Passaio County, about 150 feet east of the center of the crossing of State Highway 23, 20 feet west of silepost 36, 5 feet north of the north rail, in the top of the north end of the east abutment of railroad bridge 3600, and 1 foot lower than the base of the rail. A standard monel-wetal rivet. (73.082 meters or 239.770 feet.)
- About 0.9 mile west of <u>Pompton Junction</u>, top of south rail of the New York, Susquehanna & Western Railroad, at the crossing of State Highway 23. {241.1 feet.
- RV 39 (E.R.R.). —In Morris County, at <u>Bloomingdale</u>, Passaio County, on the New York, Susquehanna & Western Railroad, about 1,500 feet east of a large water tank, about 270 feet east of a croasing, about 200 feet east of a semanhore signal 12 feet south of the south rail, and in the top of a large boulder, 3 feet higher than the top of the rail. A standard monel-metal rivet. (85.560 meters or 250.705 feet.)
- RV 40 (E.R.R.).--At <u>Butler</u>, Morris County, on the New York, Susquehanna & Western Railroad, 70 feet west of a private orossing, 15 feet south of the south rail, in the top of the south end of the east abutment of bridge 3736 over Kikout Creek, and 3 feet lower than the base of the rail. A standard monel-metal rivet. (96.659 meters or 317.220 feet.)
- F 13.--At <u>Butler</u>, Morris County, on the New York, Susquehanna & Western Railroad, 90 feet west of a private grade crossing, 5 feet north of the north rail in the top of the north end of the center concrete pier of bridge 3736 over Eikout oreek, and 4 feet lower than the base of the rail. A standard disk, stamped #F 13 1933.* (96.065 meters or 315.173 feet.)
- 333.7 (H.J.G.S.).--At <u>Butler</u>, Morris County, on Boonton Avenue, at the First Mational Bank, about 160 feet west of the New York, Suaquehanna & Western Railroad track, at the southwest corner of the building, and on the west end of the top step of the entrance. A chiseled cross. (101.565 meters or 333.218 feet.)
- G 13.--At <u>Butler</u>, Morris County, on the New York, Busquehanna & Western Railroad, about 1.000 feet west of the station, 14 feet north of the north rail, in
 the top of the north end of the east abutment of bridge 3784 over Pequannock
 Biver, and 1 foot lower than the base of the rail. A standard disk, stamped
 13 1933* (105.791 meters or 347.083 feet.)