

**LEGEND**

- ▲ PRIMARY TRAVERSE STATION
- △ SECONDARY TRAVERSE STATION
- PRIMARY TRAVERSE
- - - SECONDARY TRAVERSE
- BENCH MARK

**SURVEY REPORT - PRIMARY TRAVERSE**

FIELD WORK PERFORMED DEC., 1975, AND JAN., 1976.  
 AVERAGE WEATHER CONDITIONS, MEAN TEMP = 32° F.  
 LENGTH HORIZONTAL TRAVERSE = 80,054.32' = 15.16 MILES  
 FIELD CLOSURE = 1/177,470. SPECIFICATION = 1/10,000  
 DISTANCE ADJUSTED AS FOLLOWS:  
 SCALE RATIO - LAT. 40° 30' = 0.9999879  
 SEA LEVEL REDUCTION = 0.99995217  
 TOTAL ADJUSTMENT: 0.9999879 X 0.99995217 = 0.99994007  
 TRAVERSE ADJUSTED USING COMPASS RULE  
 LENGTH VERTICAL CIRCUIT = 94,545' = 17.91 MILES  
 FIELD CLOSURE = 0.15'. SPECIFICATION = 0.15'  
 EQUIPMENT: KERN DKM2-A ONE SECOND THEODOLITE  
 HEWLETT PACKARD MODEL 3800A DISTANCE METER  
 PATH MODEL AL-21 AUTOMATIC LEVEL  
 ALL INSTRUMENTS CALIBRATED BEFORE AND DURING FIELD OPERATION

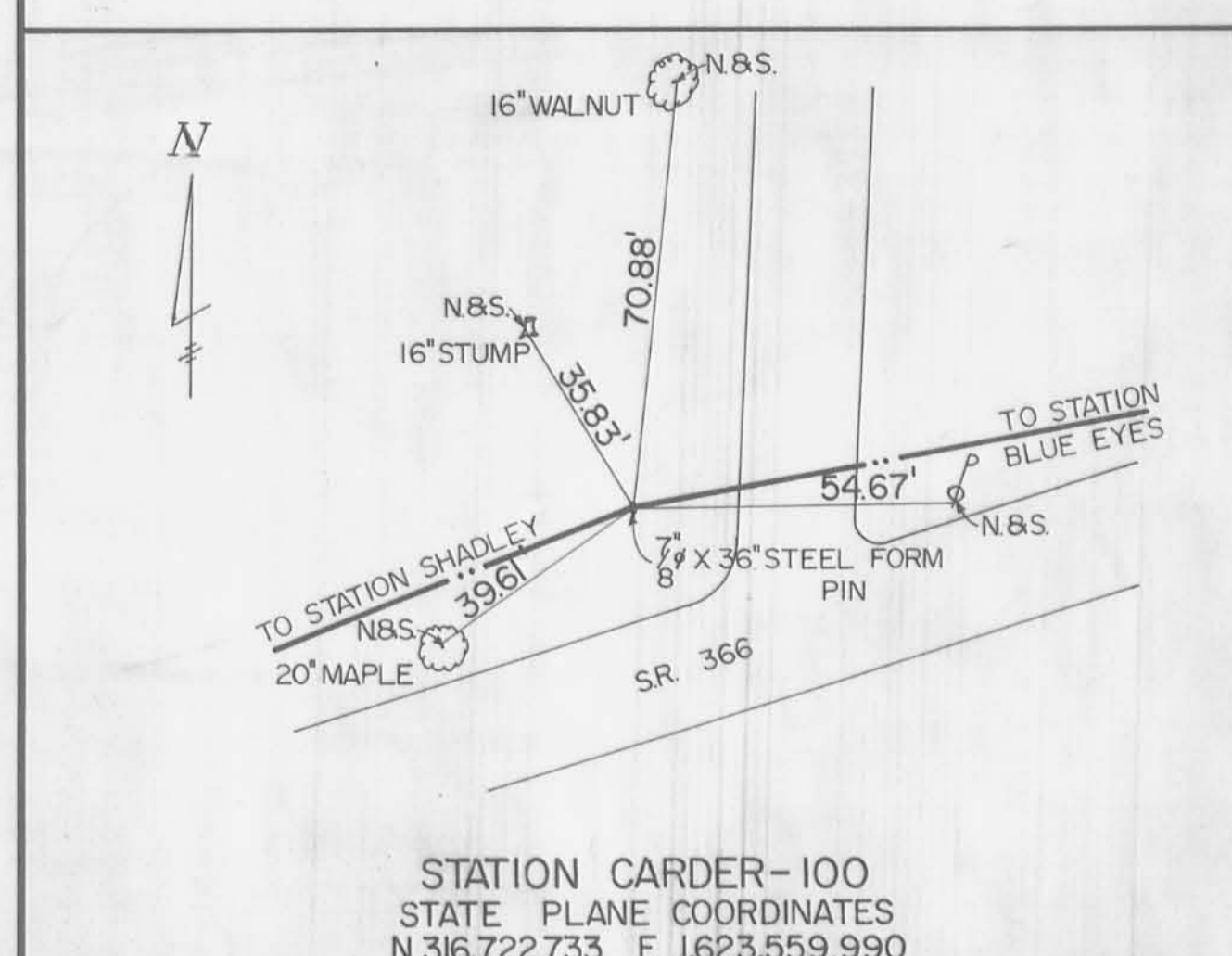
STATE OF OHIO  
 OFFICE OF  
 LAKE LANDS ADMINISTRATOR

INDIAN LAKE  
 LOGAN COUNTY  
 PRIMARY - SECONDARY TRAVERSE  
 PRIMARY BENCH CIRCUIT

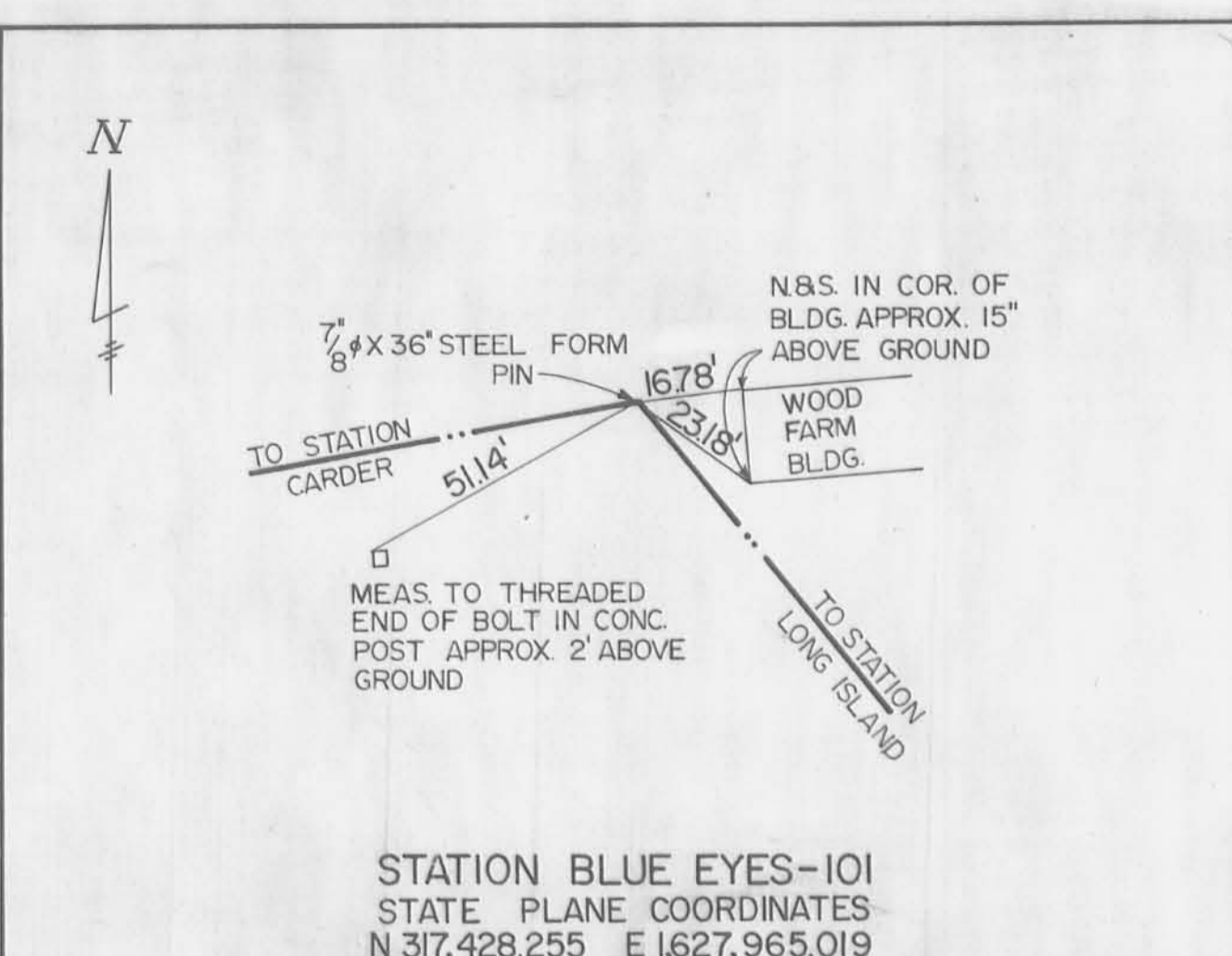
KOHLI & KALHER ASSOC. LIMITED ENGINEERS & SURVEYORS LIMA, OHIO 45801	SCALE: 1" = 1000' DATE: 10, 1975 TO 3, 1976 SURVEYED BY: E.L.E. J.A.F. T.J.M. DRAWN BY: B.W.A.
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Added Sec. Trav. Stations & Courses	B.W.A.	1/11/77
Revised N.E. Sec. Trav.	R.L.M.	9/3/76
REVISED	BY	DATE

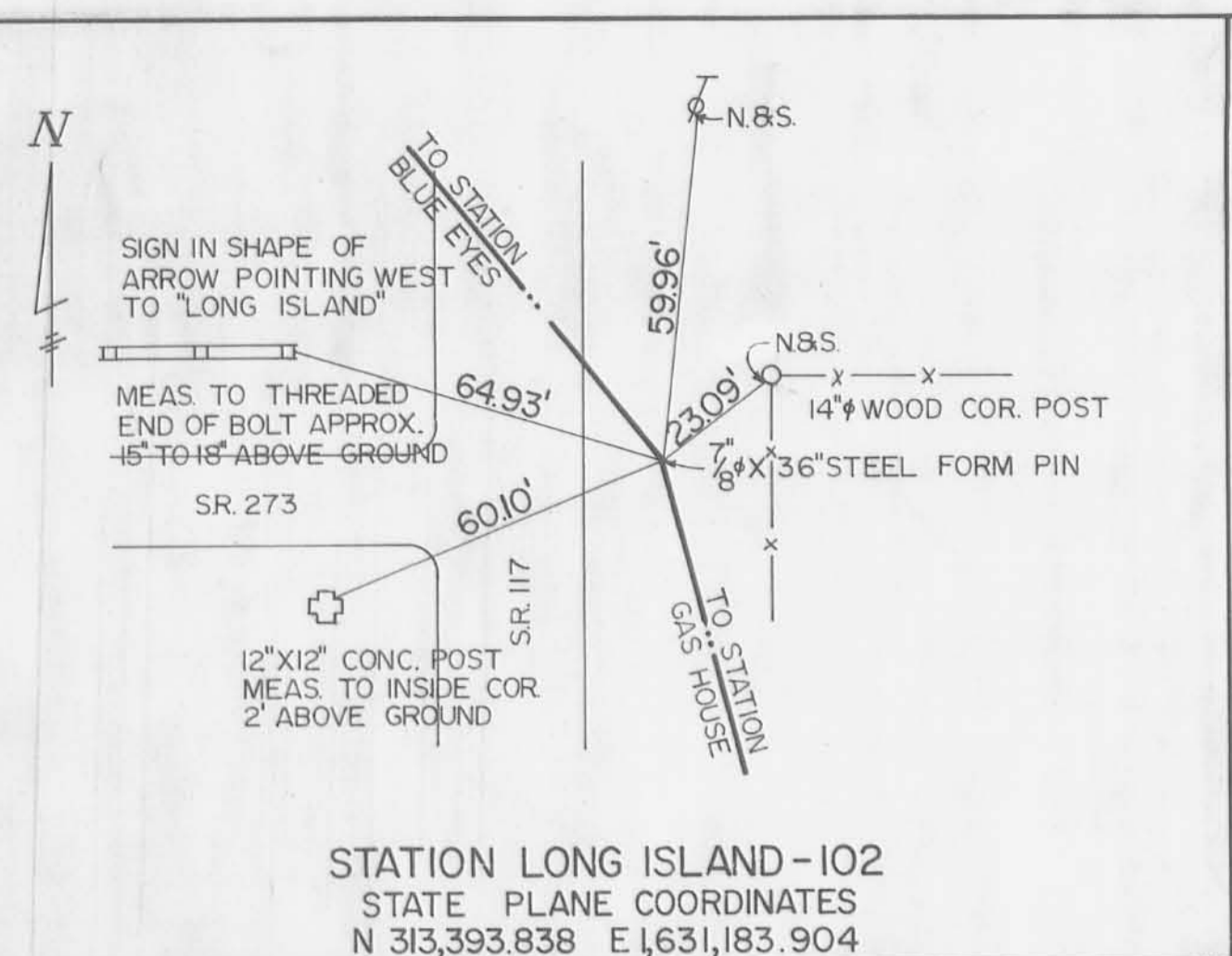




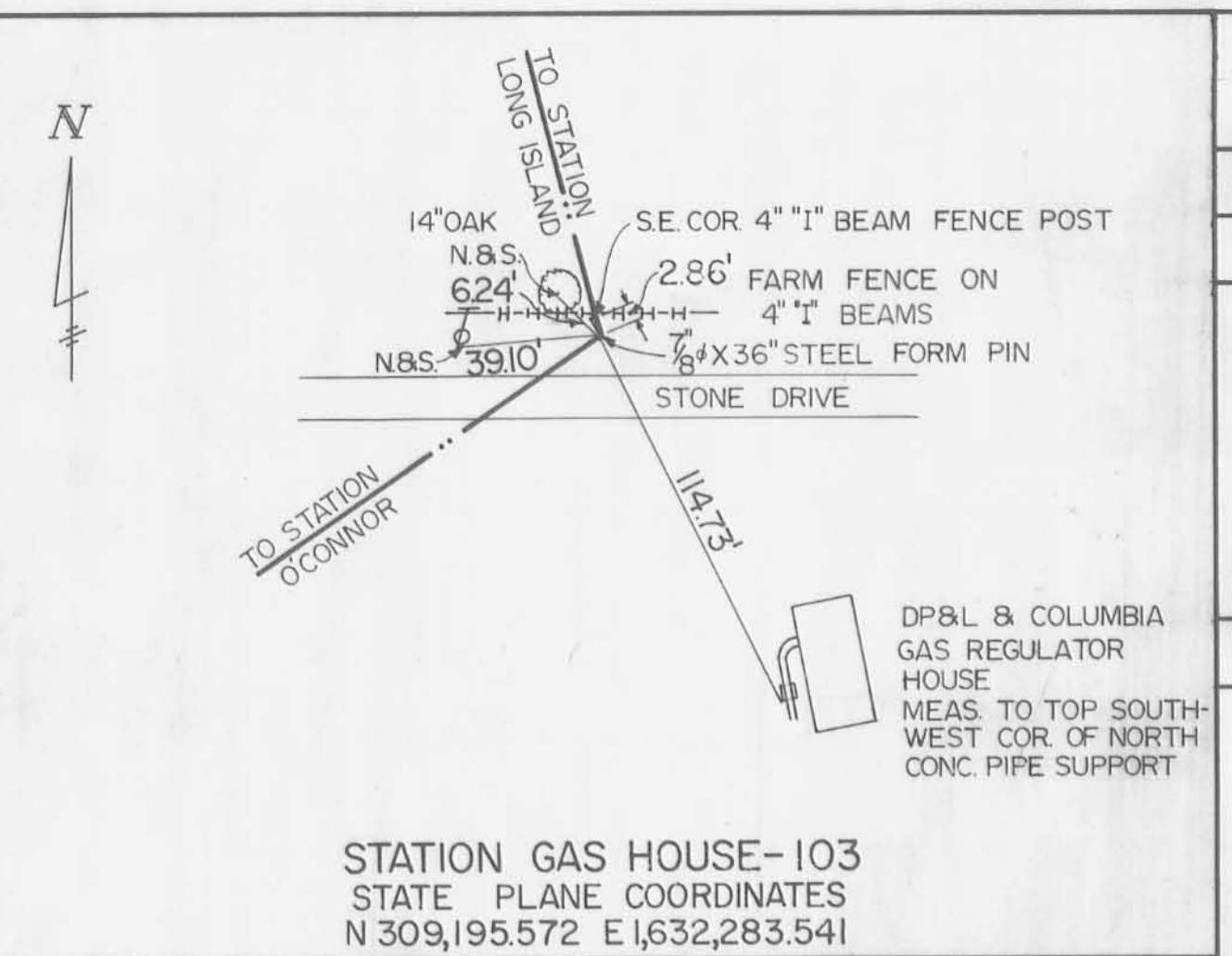
STATION CORDER-100  
STATE PLANE COORDINATES  
N 316,722.733 E 1,623,559.990



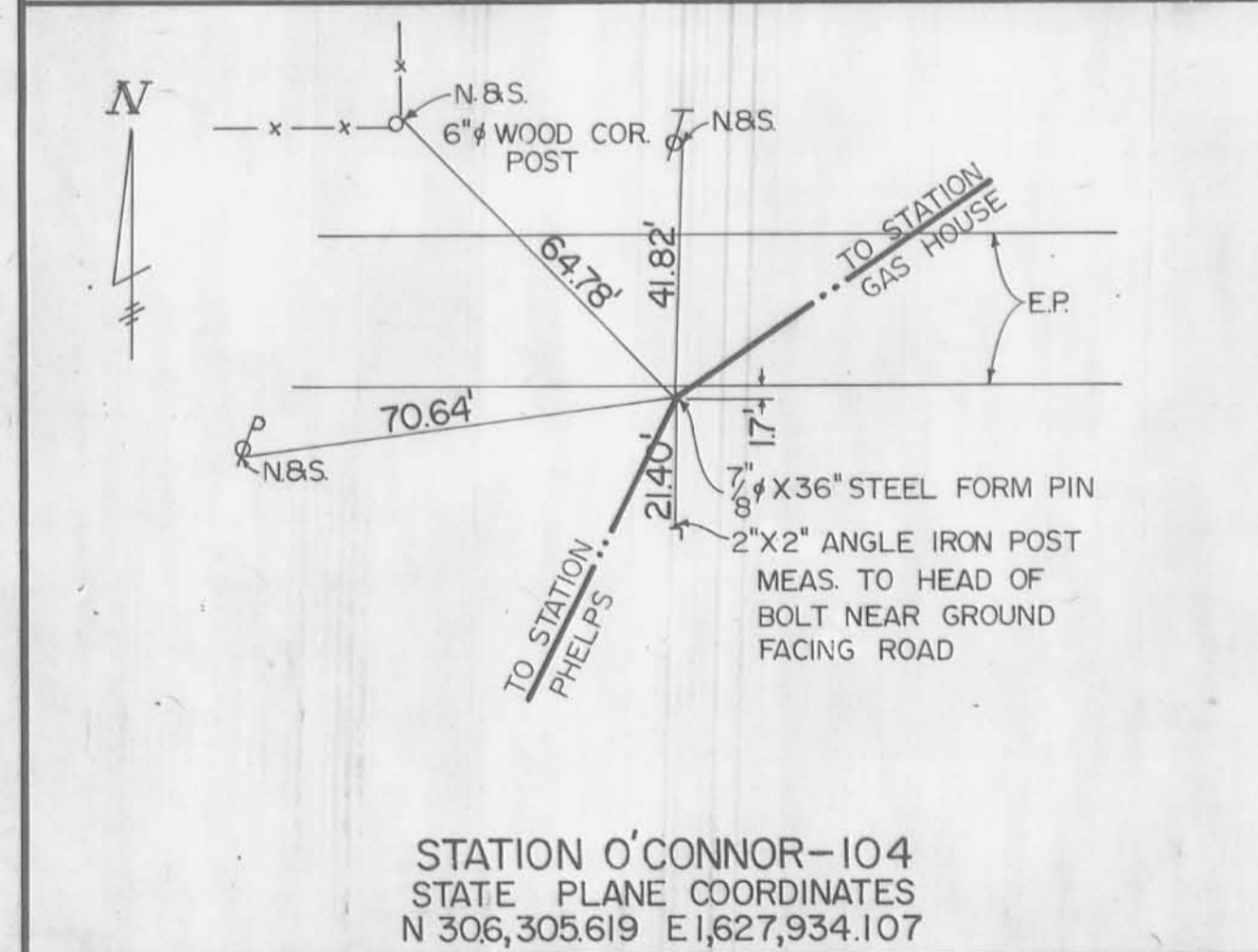
STATION BLUE EYES-101  
STATE PLANE COORDINATES  
N 317,428.255 E 1,627,965.019



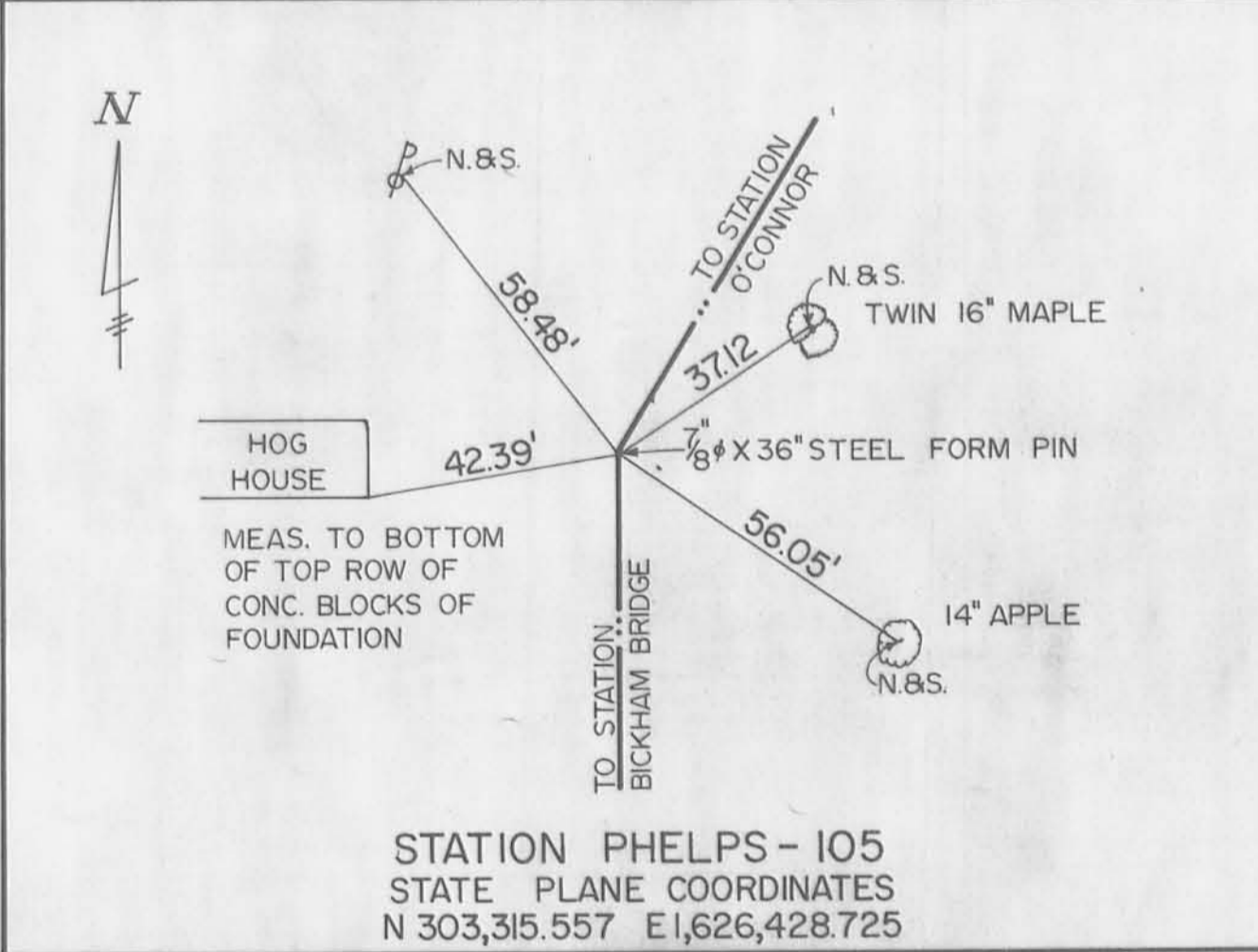
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N 313,393.838 E 1,631,183.904



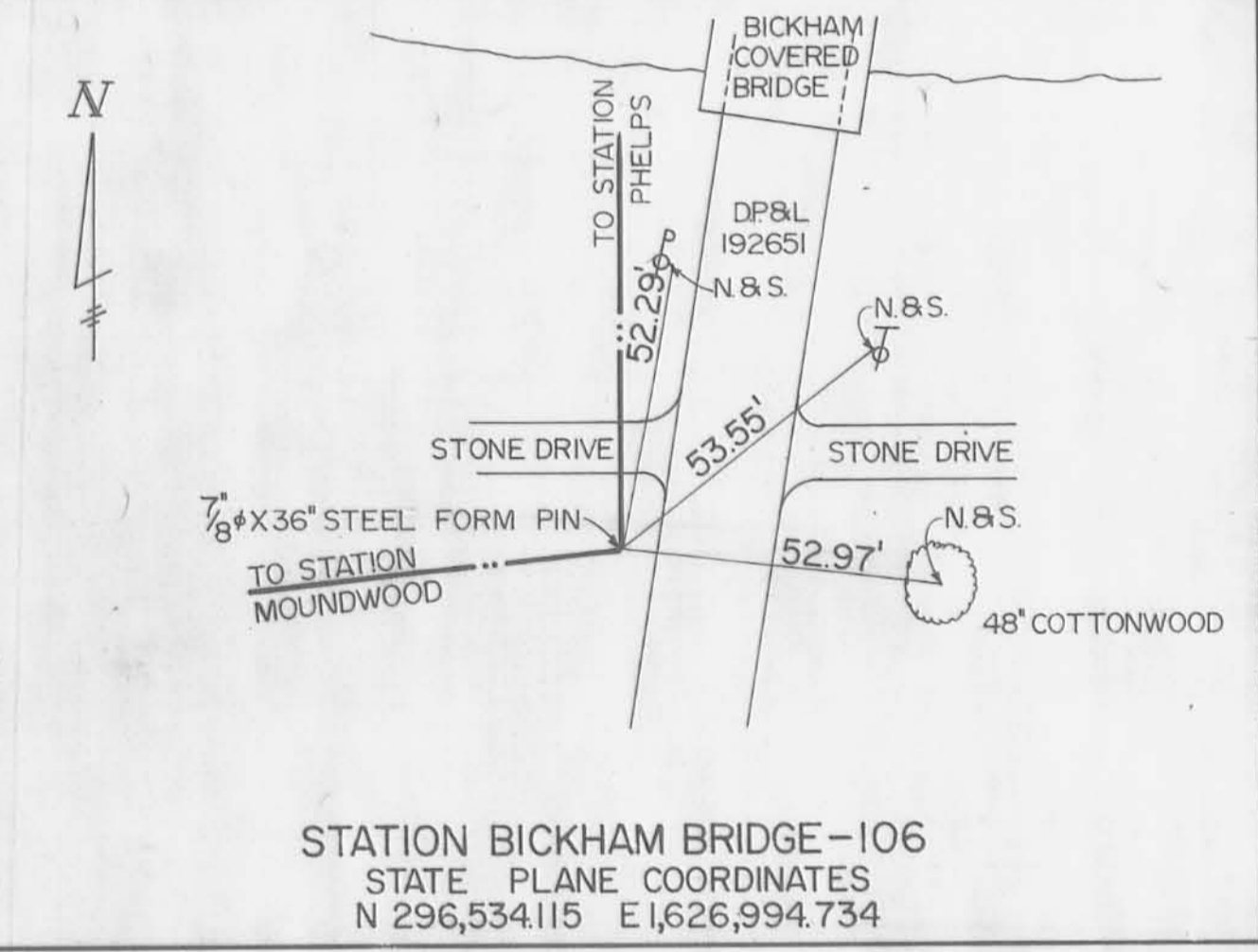
STATION GAS HOUSE-103  
STATE PLANE COORDINATES  
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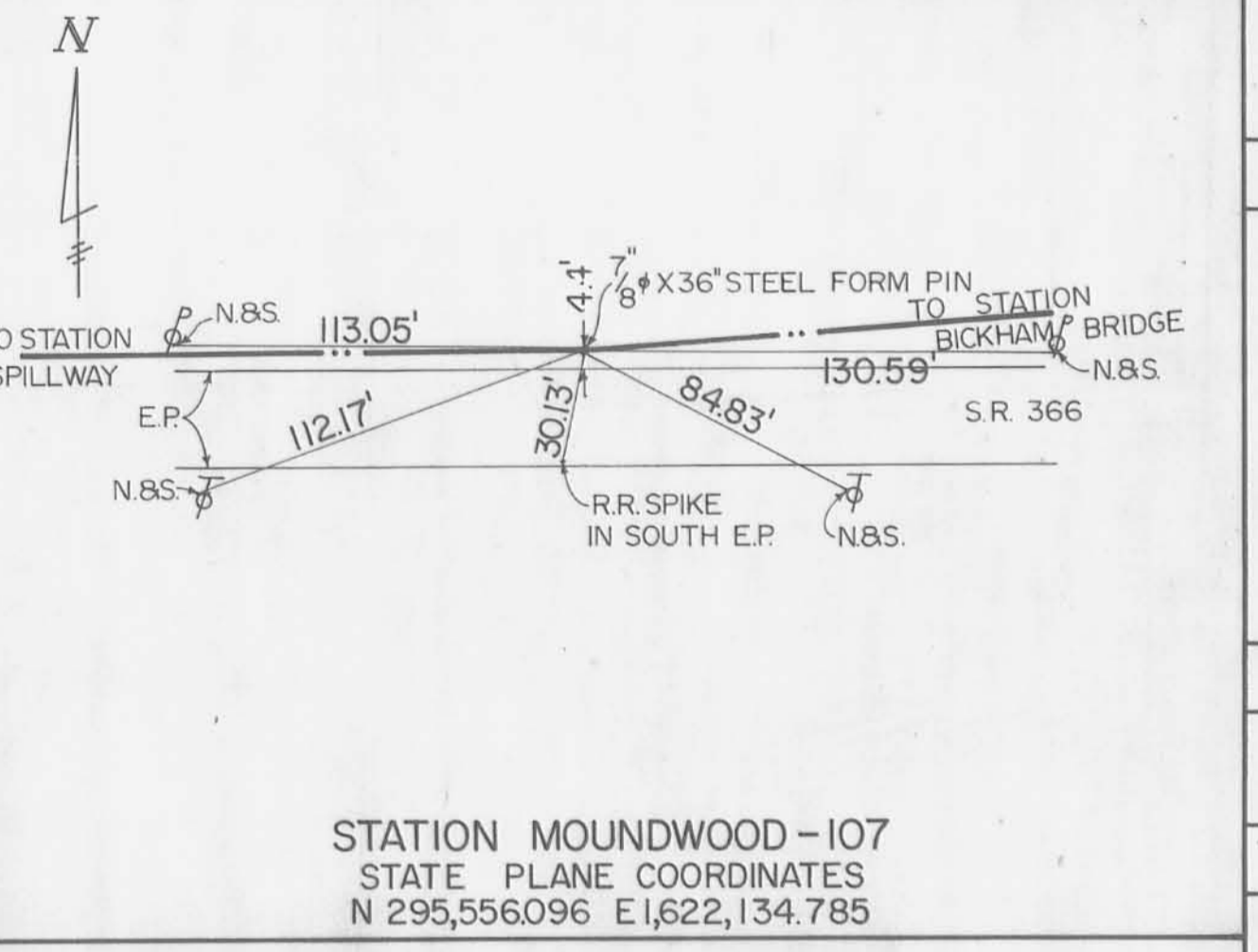
STATION O'CONNOR-104  
STATE PLANE COORDINATES  
N 306,305.619 E 1,627,934.107



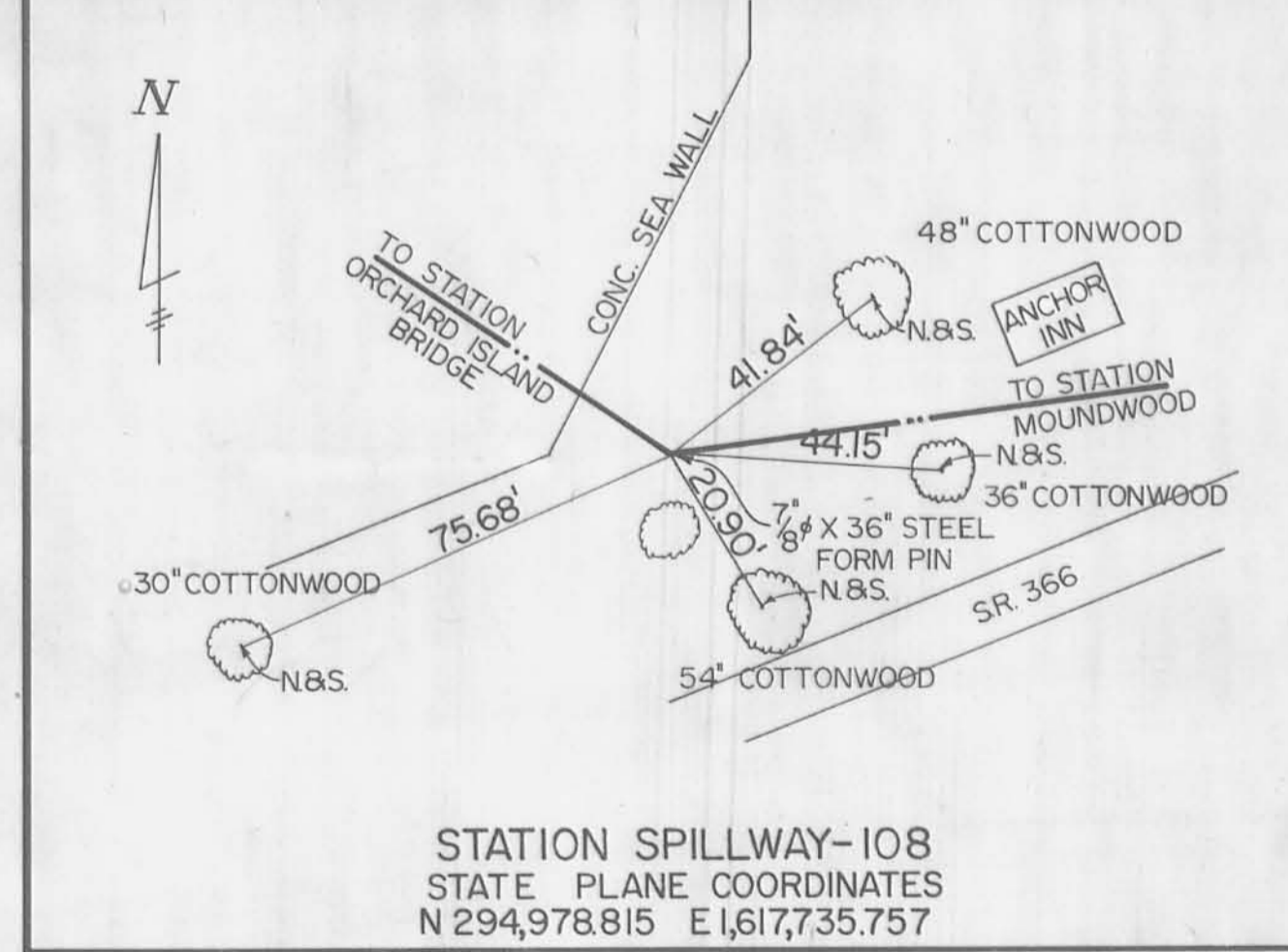
STATION PHELPS-105  
STATE PLANE COORDINATES  
N 303,315.557 E 1,626,428.725



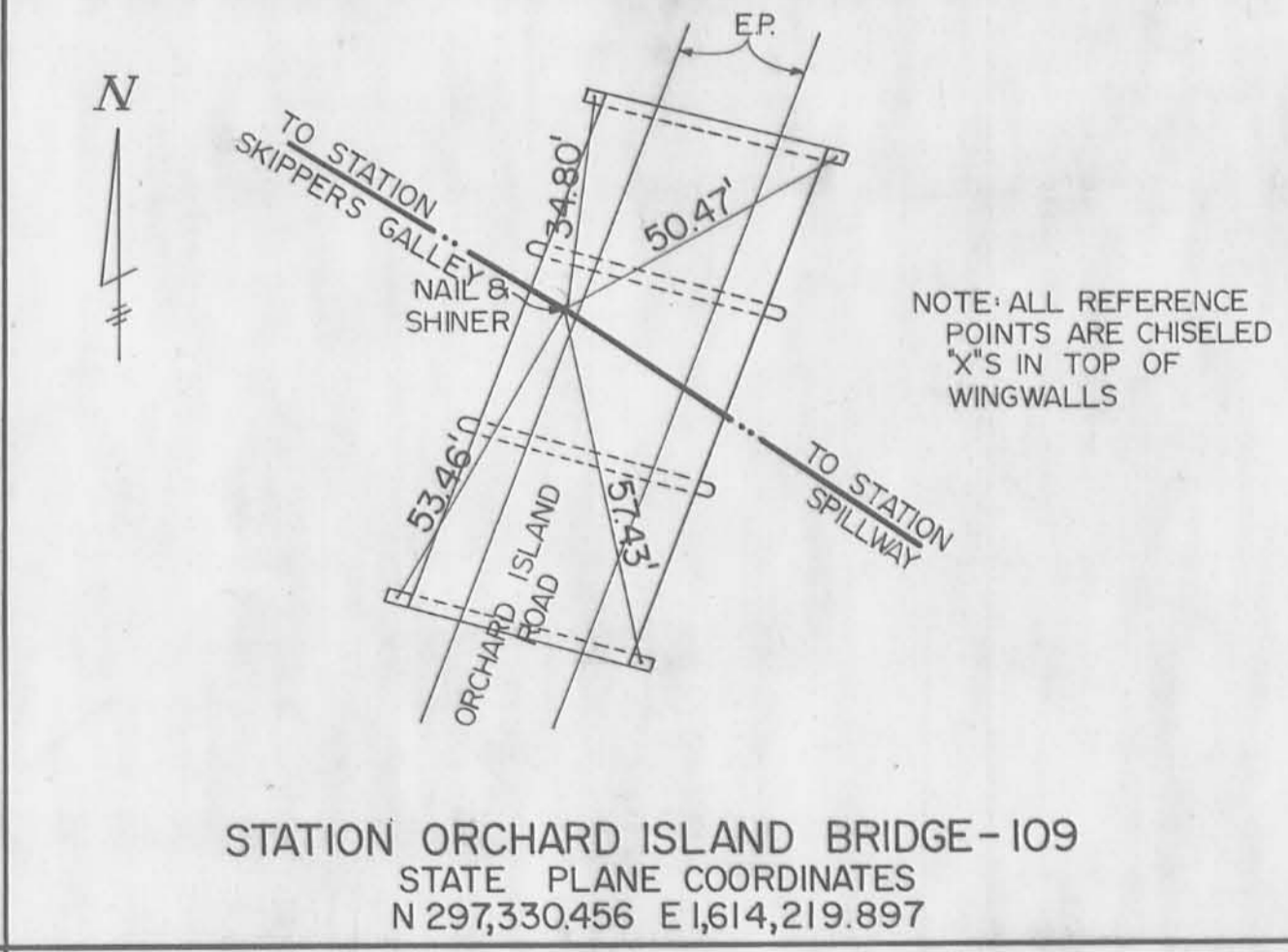
STATION BICKHAM BRIDGE-106  
STATE PLANE COORDINATES  
N 296,534.115 E 1,626,994.734



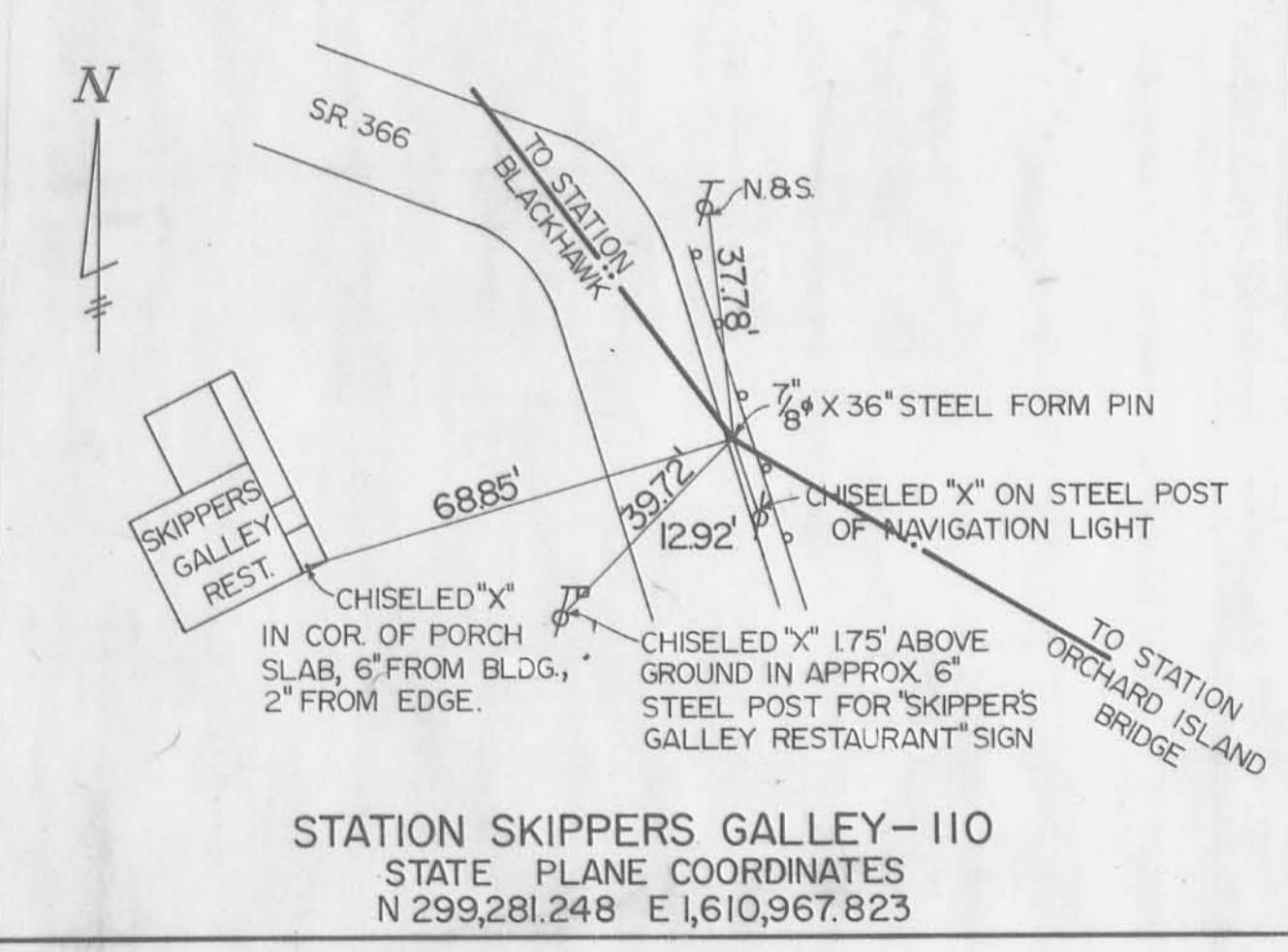
STATION MOUNDWOOD-107  
STATE PLANE COORDINATES  
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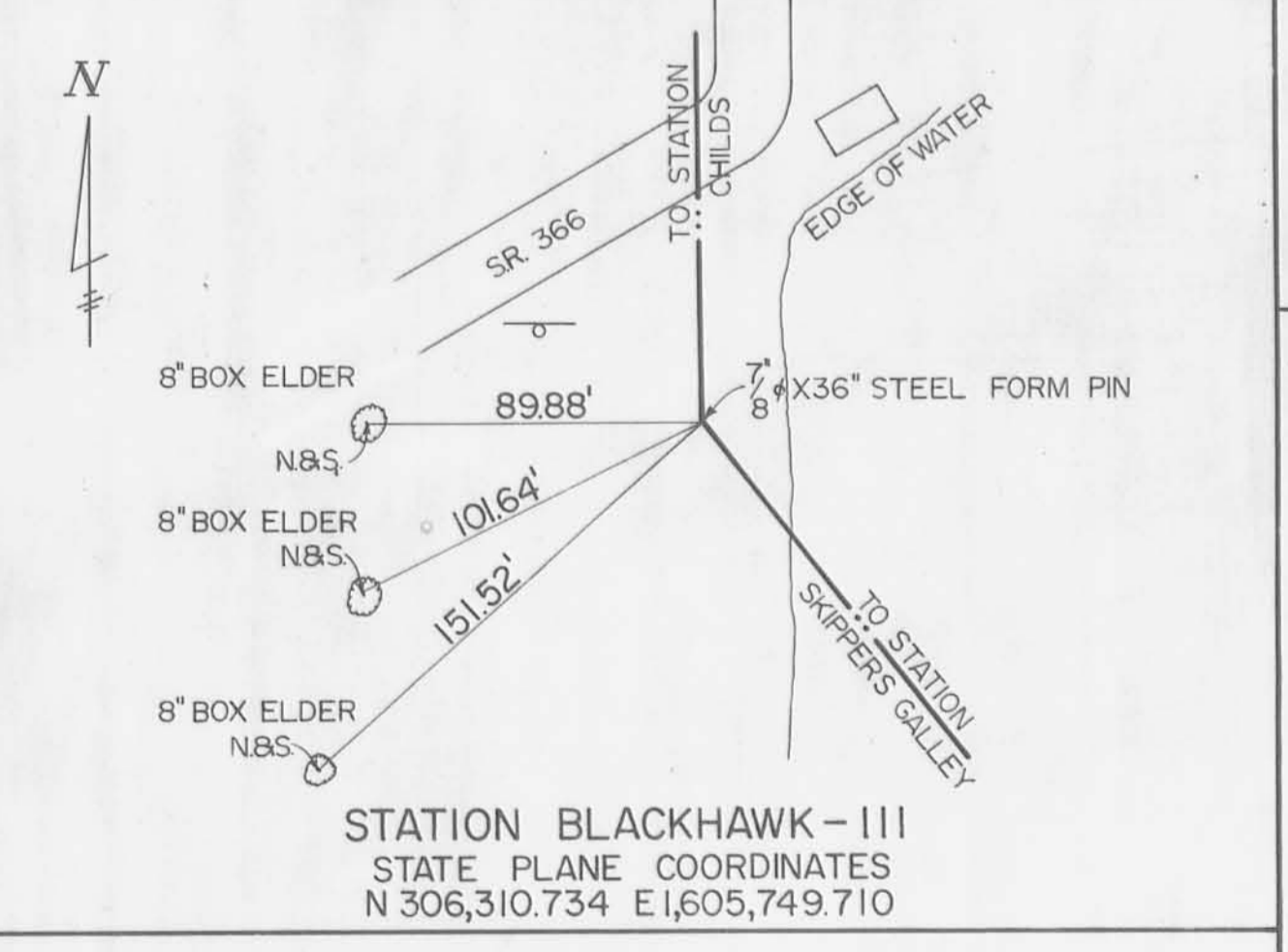
STATION SPILLWAY-108  
STATE PLANE COORDINATES  
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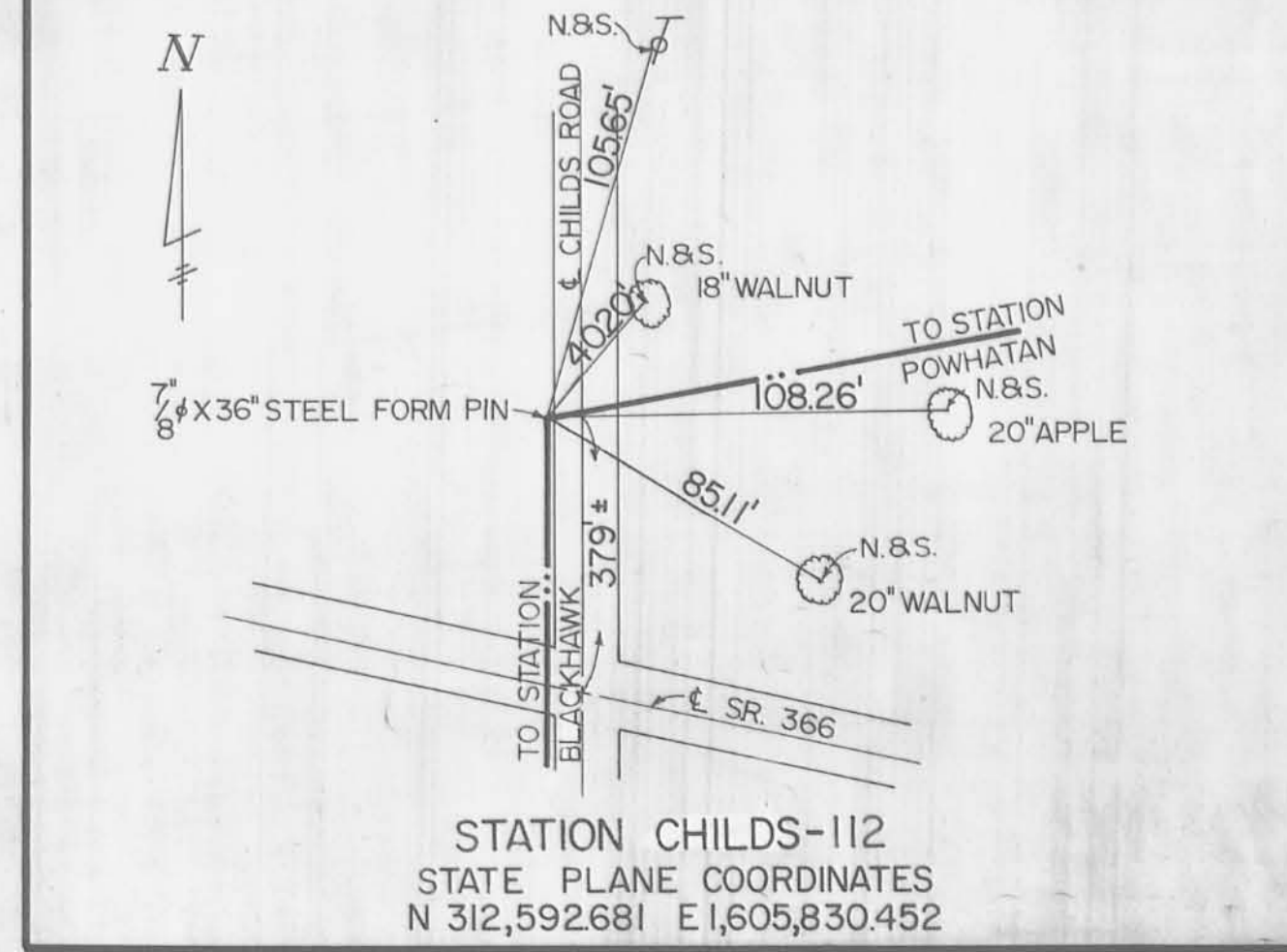
STATION ORCHARD ISLAND BRIDGE-109  
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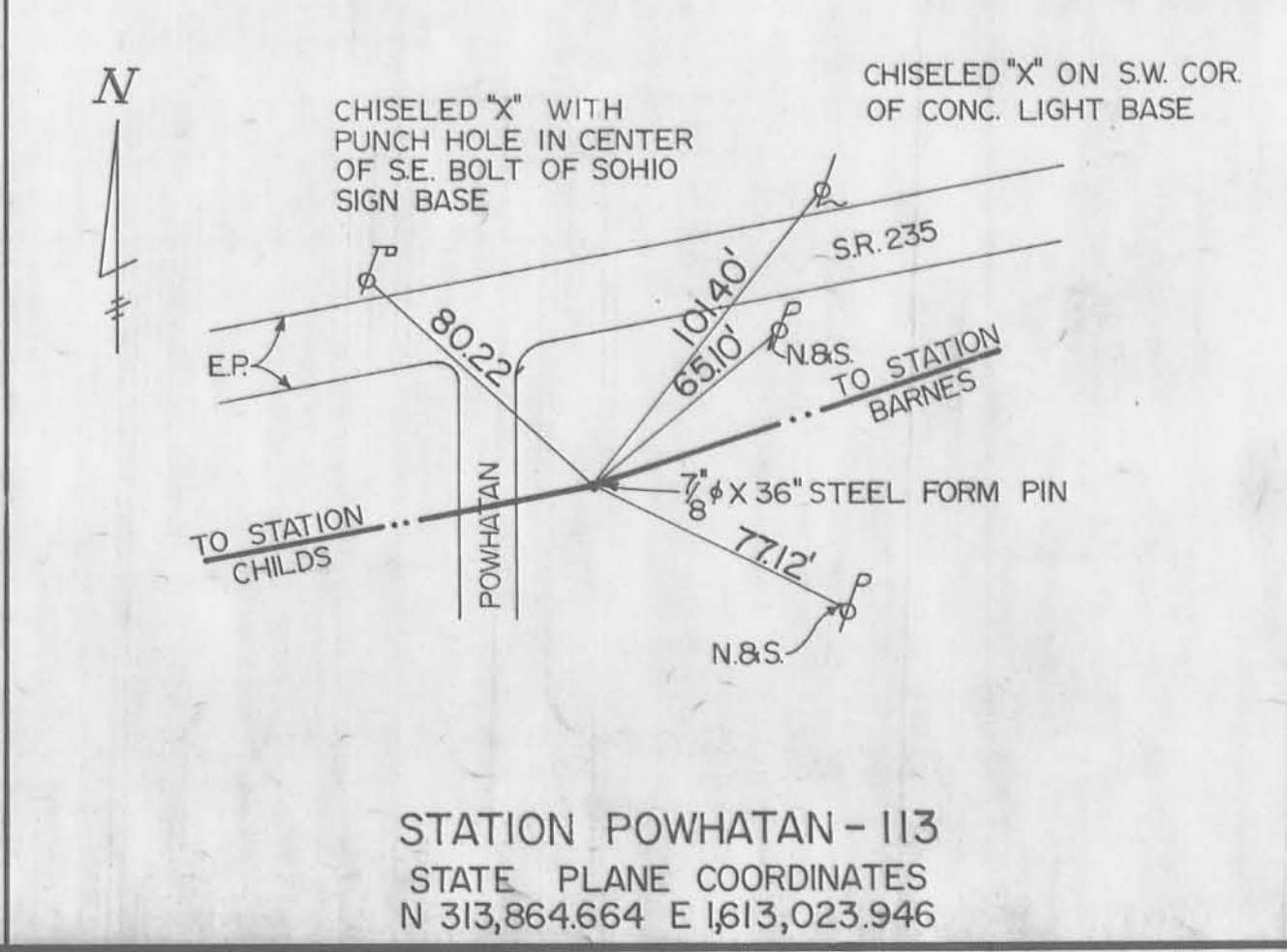
STATION SKIPPERS GALLEY-110  
STATE PLANE COORDINATES  
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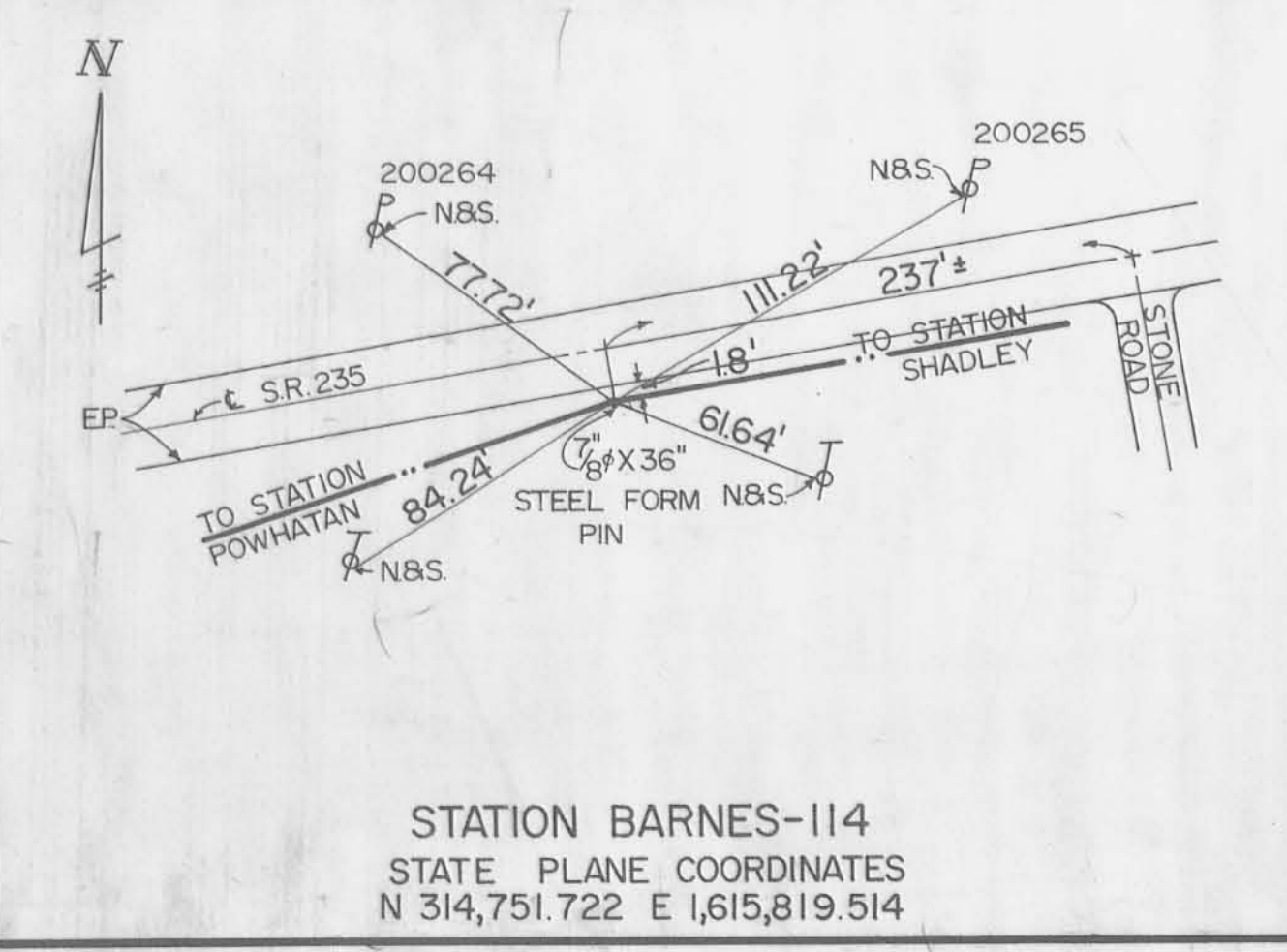
STATION BLACKHAWK-111  
STATE PLANE COORDINATES  
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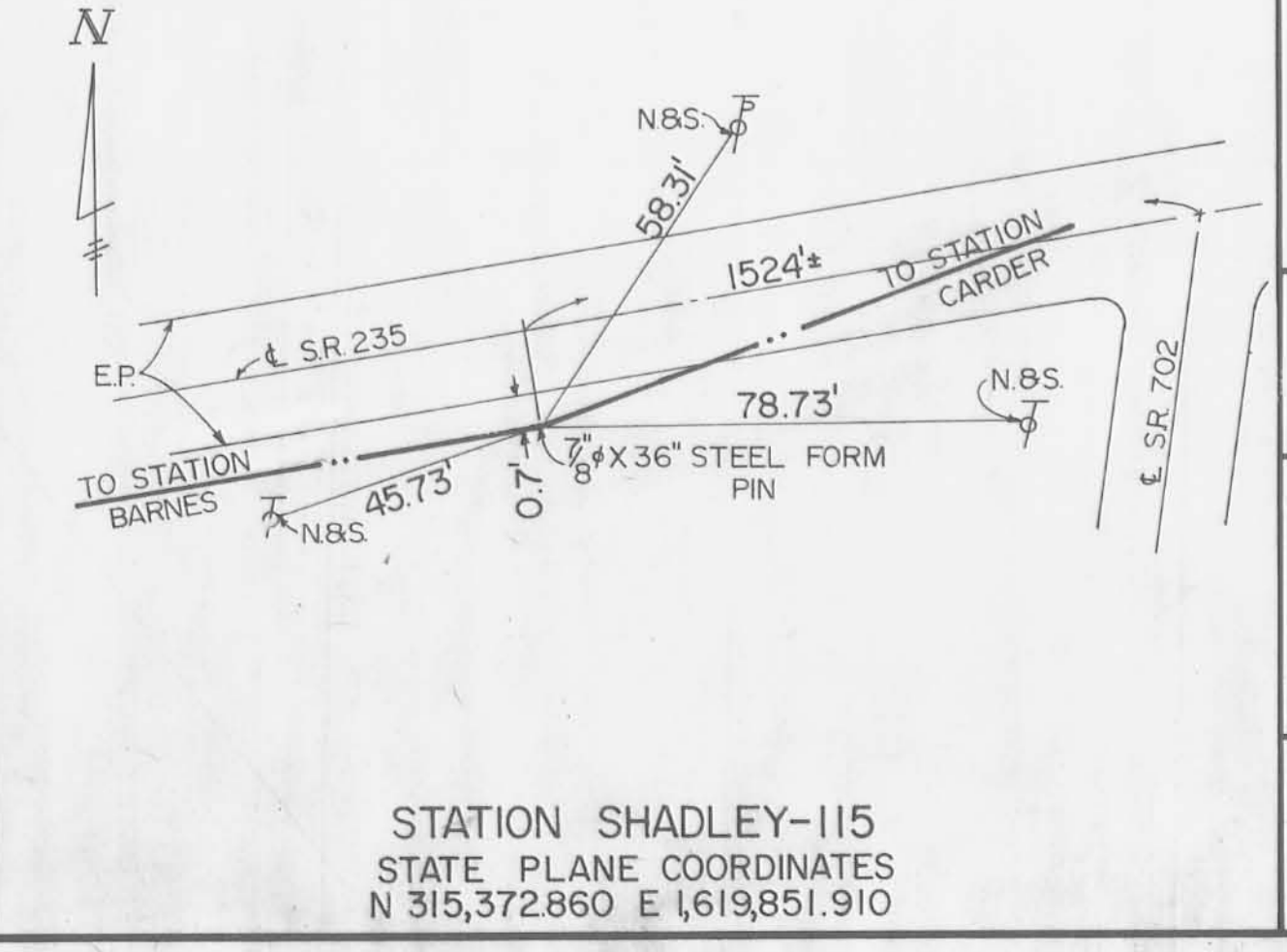
STATION CHILDS-112  
STATE PLANE COORDINATES  
N 312,592.681 E 1,605,830.452



STATION POWHATAN-113  
STATE PLANE COORDINATES  
N 313,864.664 E 1,613,023.946



STATION BARNES-114  
STATE PLANE COORDINATES  
N 314,751.722 E 1,615,819.514



STATION SHADLEY-115  
STATE PLANE COORDINATES  
N 315,372.860 E 1,619,851.910

SECONDARY TRAVERSE STATIONS STATE PLANE COORDINATES		
STATION	NORTH	EAST
NORTH SECONDARY TRAVERSE		
N2-1	N313228.880	E1615625.931
N2-2	N312801.661	E1616174.378
N2-3	N312187.600	E1615688.463
N2-4	N312036.662	E1615015.584
N2-5	N311294.593	E1614626.603
N2-6	N311156.481	E1613690.693
N2-7	N313457.357	E1613420.640
NORTH EAST SECONDARY TRAVERSE		
NE-1A	N314975.938	E1617275.146
NE-1	N314000.147	E1617397.480
NE-2	N313635.805	E1617787.965
NE-3	N312959.505	E1617876.792
NE-4	N311817.999	E1619433.119
NE-5	N312183.643	E1619570.205
NE-6	N313096.441	E1620375.322
NE-7	N315331.002	E1621248.501
NE-8	N315698.998	E1622188.804
EAST SECONDARY TRAVERSE		
E2-1	N305569.948	E1627563.723
E2-2	N304110.454	E1624407.161
E2-3	N305578.917	E1623309.497
E2-4	N306536.308	E1624855.522
E2-5	N307139.263	E1625334.718
E2-6	N306039.994	E1625413.257
E2-7	N304882.958	E1623829.720
E2-8	N304666.469	E1623533.348
E2-9	N304232.876	E1623425.576
LAKE ISLAND SECONDARY TRAVERSE		
L2-1	N300653.608	E1616879.600
L2-2	N304639.612	E1621471.822
SOUTHEAST SECONDARY TRAVERSE		
SE-1A	N295096.873	E1618635.367
SE-1	N296129.029	E1618576.454
SE-2	N296692.224	E1619403.373
SE-3	N297146.609	E1619618.739
SE-4	N297704.180	E1619915.011
SE-5	N298412.979	E1620345.670
SE-7	N298658.439	E1621894.203
SE-6	N296935.480	E1620933.357

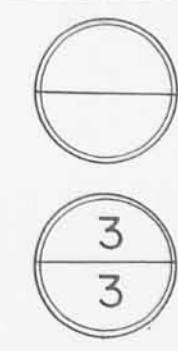
STATE OF OHIO  
OFFICE OF  
LAKE LANDS ADMINISTRATOR

INDIAN LAKE  
LOGAN COUNTY

REFERENCES-  
PRIMARY TRAVERSE STATIONS

KOHLI & KALIHAR ASSOC. LIMITED	SCALE: NO SCALE
ENGINEERS & SURVEYORS	DATE: 4-20-76
LIMA, OHIO 45801	SURVEYED BY: E.L.E. J.A.F.
	DRAWN BY: B.W.A.





B.M.N <sup>o</sup>	ELEV.	DESCRIPTION	B.M.N <sup>o</sup>	ELEV.	DESCRIPTION	B.M.N <sup>o</sup>	ELEV.	DESCRIPTION	B.M.N <sup>o</sup>	ELEV.	DESCRIPTION	B.M.N <sup>o</sup>	ELEV.	DESCRIPTION
1	996.40	West end spillway. (Flowline)	14	1013.78	Spike in 2nd telephone pole west of intersection Co.Rds 98 & 254, south side pavm't.	27	1008.81	R.R. Spike in 48" Ash, 75' east of S.R.117 in fence row, 2000' north of S.R.273, east of pipeline marker.	40	1014.18	Spike in power pole #200196 at SE cor. S.R. 235 & Ash Ave.	53	999.35	Nail in power pole #196790, west side S.R. 366, at State & Sta. 979+00.
2	1000.34	"X" in concrete above west end spillway.	15	1005.05	Spike in power pole #192728, 2nd pole south of BreezyDr., west side Co.Rd 254.	28	1007.99	Spike in telephone pole, east side S.R.117, 120' south of Hardin-Logan County sign.	41	1031.35	Spike in power pole #238889, south side S.R. 235 at Co. Rd. 93.	54	997.19	U.S.G.S. Lakeview, Chiseled square on curb west of catch basin opposite intersection S.R.366 & 235.
3	1000.15	Punch hole in concrete above east end spillway	16	1006.93	Spike in power pole #87073, north side Co. Rd.254, NW of Ed Galvin mailbox 183 O'Connors Landing.	29	1012.63	U.S.G.S. Chiseled square, west end traffic island in intersection S.R.117 & 235.	42	1029.52	Spike in telephone pole, north side S.R. 235, 1500' west of road T-93, east of State Park.	55	999.60	Spike in power pole #196779, north side S.R. 366, 1st. pole east of Gillette Bait House
4	1006.99	Spike in power pole #192563, 1st. pole east of Marion Dr., North side of S.R.366	17	1003.09	Spike in 24" Sycamore, south side Co. Rd. 254, 1200' west of road T-38.	30	1005.05	Spike in power pole #200462, south side S.R. 235, 1600' west S.R. 117.	43	1029.87	Spike in light pole #375506, south side S.R. 235 at entrance to camp area.	56	1000.19	Spike in power pole #192394, north side S.R. 366 at Logan Ave., 1st. pole east McDonalds Gifts sign.
5	1005.25	Punch hole in NE. corner concrete head-wall, north side S.R.366, 300' west of road T-95.	18	1007.10	Spike in 24" Cottonwood, north side of Co. Rd. 38, 800' east of O'Connor Road.	31	1002.26	Spike in power pole #200453, south side S.R. 235 at Parker Drive.	44	1020.71	Spike in telephone pole, north side S.R. 235, 400' east of road T-281.	57	999.77	Spike in power pole #192385, north side S.R. 366, 2nd pole east Midway Ave.
6	1010.34	Spike in power pole #192603, north side of intersection S.R.366 & 368.	19	1012.09	Spike in telephone pole #9922, north side Co. Rd. 38, 1650' east of road T-38, west of John McDuffee res.	32	1001.92	Spike in power pole #200444, north side S.R. 235, 1700' east of road T-251.	45	1022.90	Spike in guy pole opposite power pole #196955, south side S.R. 235, 1500' east of S.R. 366.	58	998.65	Spike in power pole #192376, north side S.R. 366, west of Russells Point Corp. sign.
7	1012.76	Spike in telephone pole #065EA, north pole on south side of S.R. 366, 1600' east S.R. 368	20	1026.00	Spike in telephone pole, north side of Co. Rd. 38, 200' east of windmill, 1100' west of S.R.117.	33	1007.30	Spike in power pole #238023, south side S.R. 235, 250' east of road T-251.	46	1021.39	R.R. Spike in 22" Cedar, SW cor. intersection S.R. 235 & 366, in cemetery west of Ritchey Monument.	59	1002.51	Spike in power pole #192365, east side S.R. 366, 300' south of curve.
8	1023.43	Spike in telephone pole south side S.R. 366 at lane west of "O'Connor" lodge sign, 2500' east S.R. 368	21	1021.62	Top concrete R/W monument, east side S.R.117, 70' north Co. Rd. 38.	34	1002.19	Spike in power pole #200423, south side S.R. 235 at Logan Co. bridge 235-2390.	47	1001.23	Spike in telephone pole, west side S.R. 366, north of Sunview Drive.	60	1000.97	Spike in power pole #192190, east side S.R. 366, 2nd. pole south of Wilgus Drive.
9	1030.39	Spike in power pole, north Roaches Outboard Motor Repair Shop, Co. Rd. 38 NW corner intersection.	22	1013.82	Spike in telephone pole, east side S.R.117, 1050' south of S.R. 273, 40' south Huntsville-Bellfontaine sign.	35	1013.23	U.S.G.S. Primary Traverse Sta.91-1013, intersection S.R. 235 & Co. Rd. 250.	48	998.40	Spike in telephone pole #061DY07, west side S.R. 366, 100' north of Elm Drive.	61	999.77	Spike in 26" Cottonwood, north side S.R. 366 opposite Antonios Restaurant.
10	1008.03	Punch mark top step SW wingwall covered bridge Co. Rd. 38.	23	1010.72	Top concrete R/W monument, S.E. cor. Columbia Gas lot, S.R.117 & 273.	36	1018.42	Spike in power pole #200346, north side S.R. 235, 700' west of S.R.702.	49	1000.27	Spike in 10" Cottonwood, east side S.R. 366 opposite State Sta. 1034 +52.91 P.T.	62	1006.50	R.R. Spike in telephone pole, south side S.R. 366 in front of Russells Point Post Office.
11	1013.52	Spike in power pole #192671, west side Co. Rd 98, 650' north of old school bldg.	24	1005.92	U.S.G.S. NW cor. bridge wingwall North Fork Miami River, S.R. 117, 18-SC-1959-1006.	37	1024.68	Spike in power pole #200340, north side S.R. 235, 200' east of Sassafras Point Road.	50	1000.09	U.S.G.S. 46-SC-1959-1000 Concrete base of service station sign, west side S.R. 366 at Co. Rd. 87.	63	1000.46	R.R. Spike in power pole #187555, north side S.R. 366 at Russells Point Corp. sign.
12	1014.60	Spike in power pole #192678, west side Co. Rd. 98, 250' south of road T-96.	25	1008.05	Spike in power pole #270 <sub>5</sub> , west side S.R.117, 1750' north of bridge.	38	1018.43	R.R. Spike in power pole, north side S.R. 235, west of Oak Street.	51	1001.41	Spike in guard rail, west side S.R. 366 at State & Sta. 1006 +07.	64	1000.56	Spike in power pole #192532, north side S.R. 366, 850' east of Artist Island.
13	1017.09	Spike in power pole #192701, west side Co. Rd. 98, 1650' north of road T-96.	26	1009.89	Spike in power pole #39, west side S.R.117 60' south S.R. 273.	39	1022.51	NW corner concrete pump base at Barnes Store, south side S.R.235.	52	999.70	Spike in power pole #196799, east side S.R. 366 at State & Sta. 992 +30.	65	1000.10	Nail in concrete wall, north side S.R. 366 opposite Stephonson Bait & Tackle Shop drive.

NOTE: All Bench Marks, with the exception of 1, 2, 3, 5, 10, 21, 23, 24, 29, 35, 39, 50, 54, and 65, have the Bench Mark N<sup>o</sup> and elevation stamped on an attached metal tag. All Bench Marks are painted orange.

STATE OF OHIO OFFICE OF LAKE LANDS ADMINISTRATOR	
INDIAN LAKE LOGAN COUNTY <b>BENCH MARKS- PRIMARY CIRCUIT</b>	
KOHLI & KALIHAR ASSOC. LIMITED ENGINEERS & SURVEYORS LIMA, OHIO 45801	DRAWN BY: BWA DATE: 4-27-76 SURVEYED BY: TJM