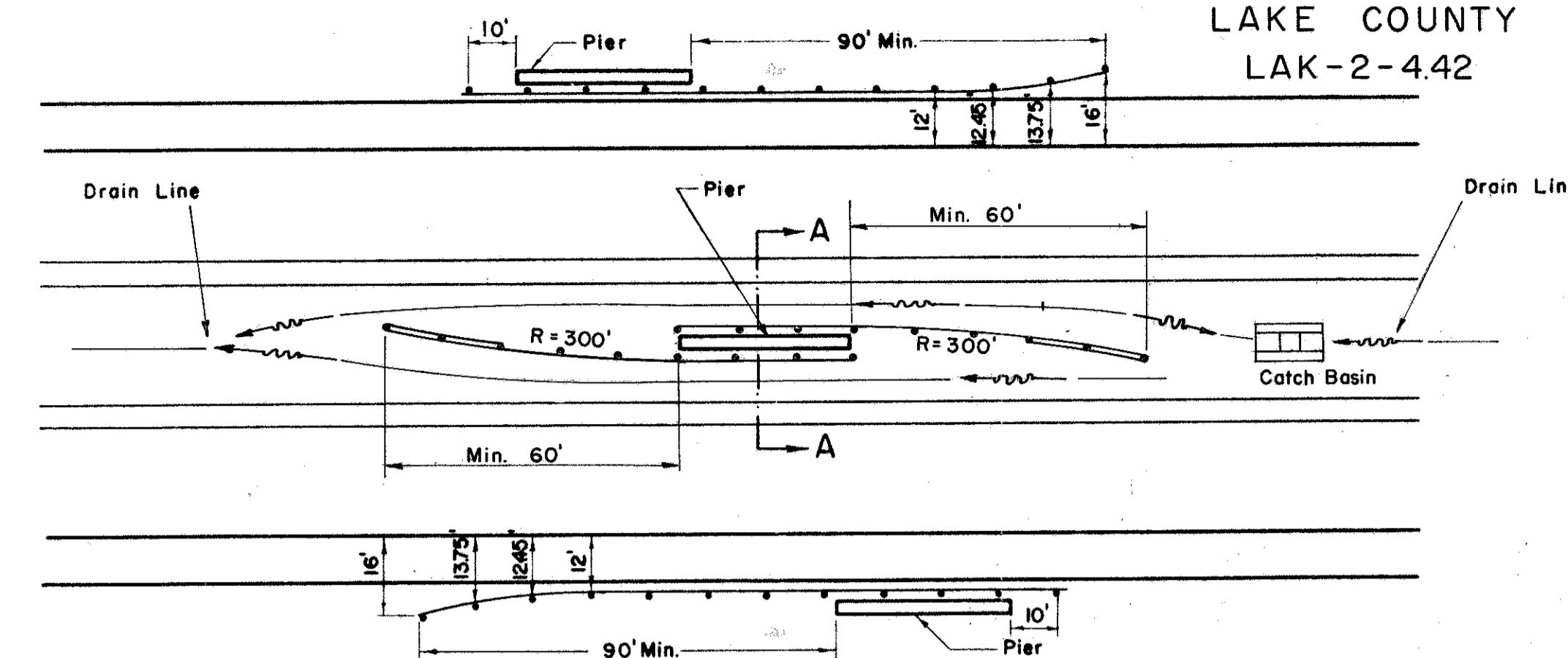
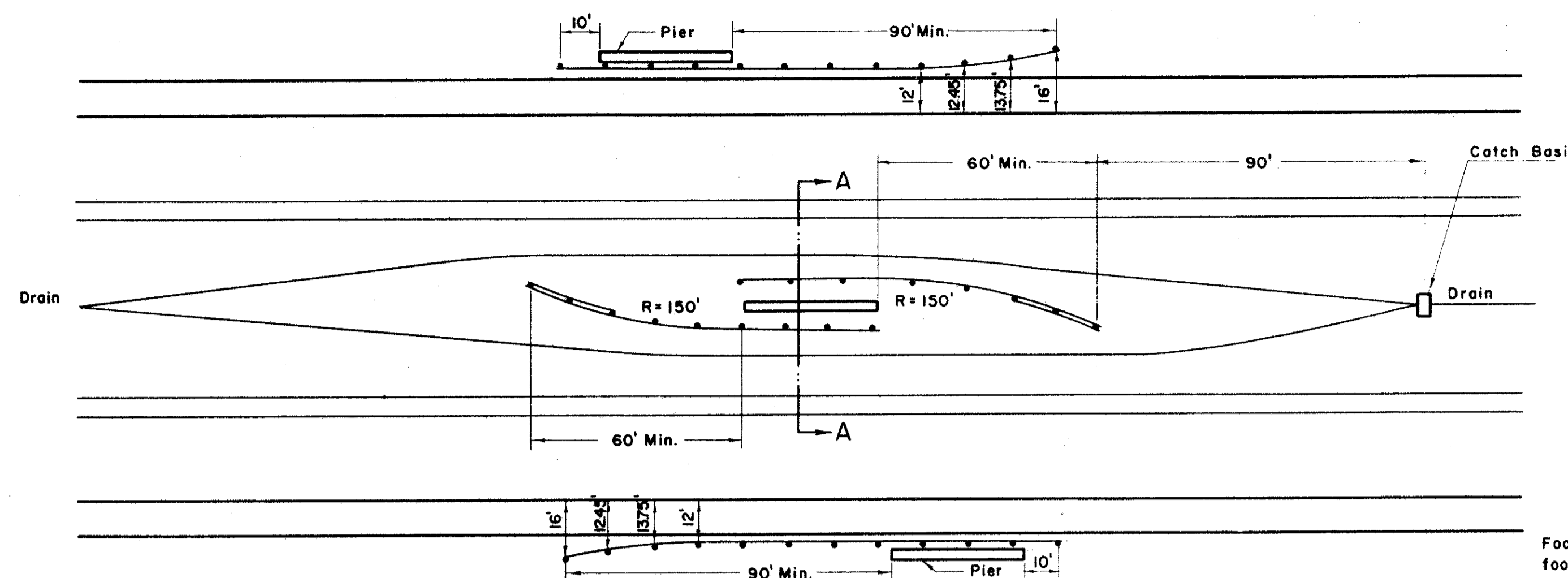


# PIER PROTECTION

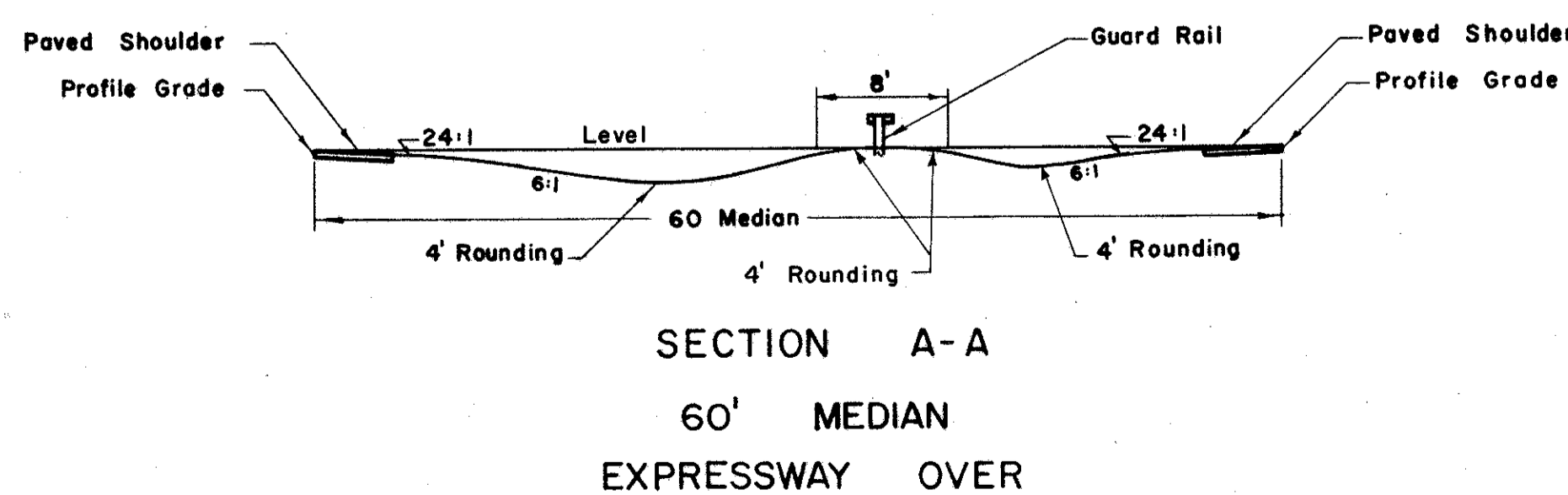
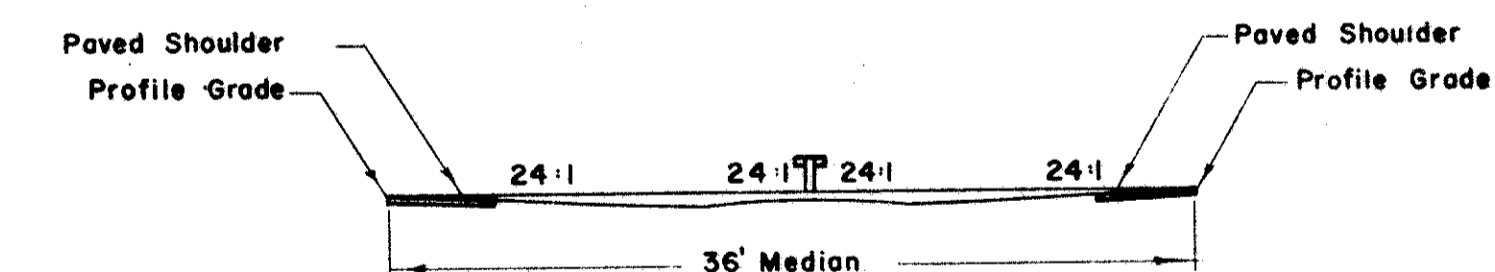
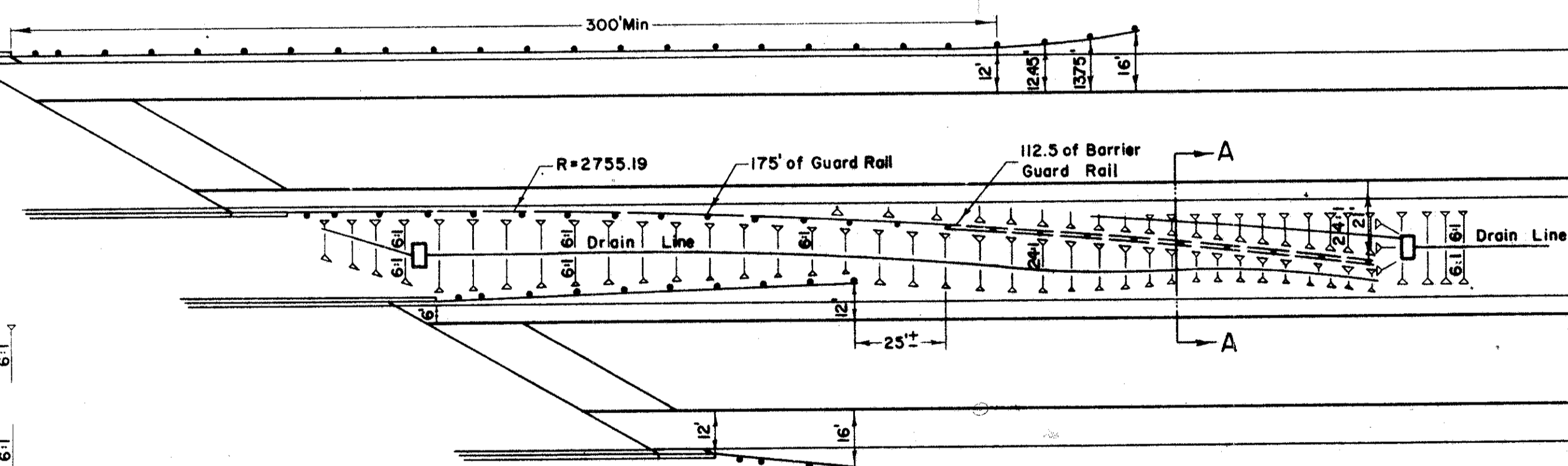
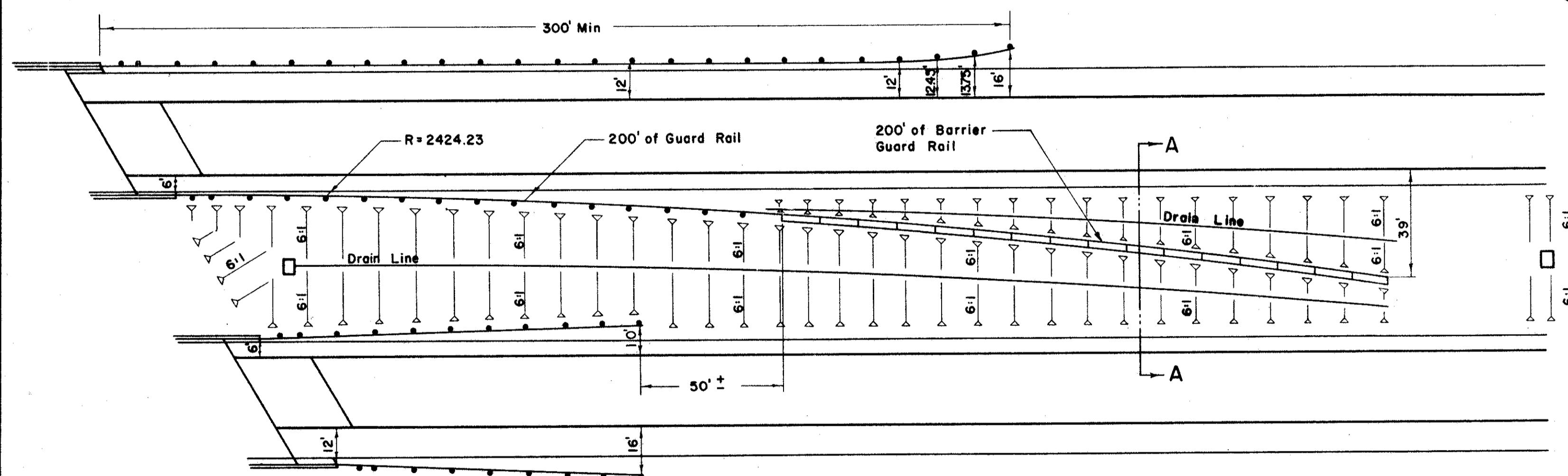
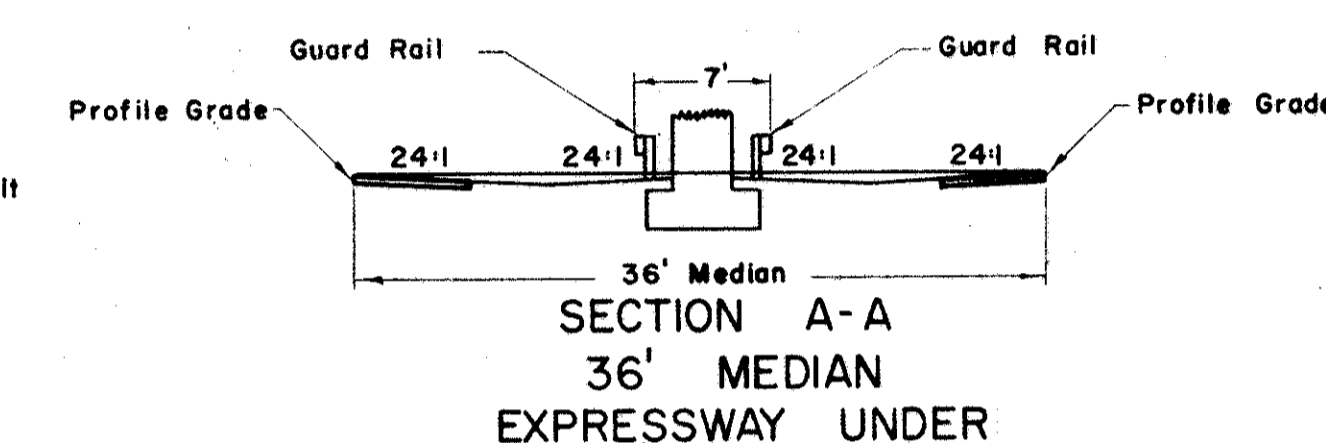
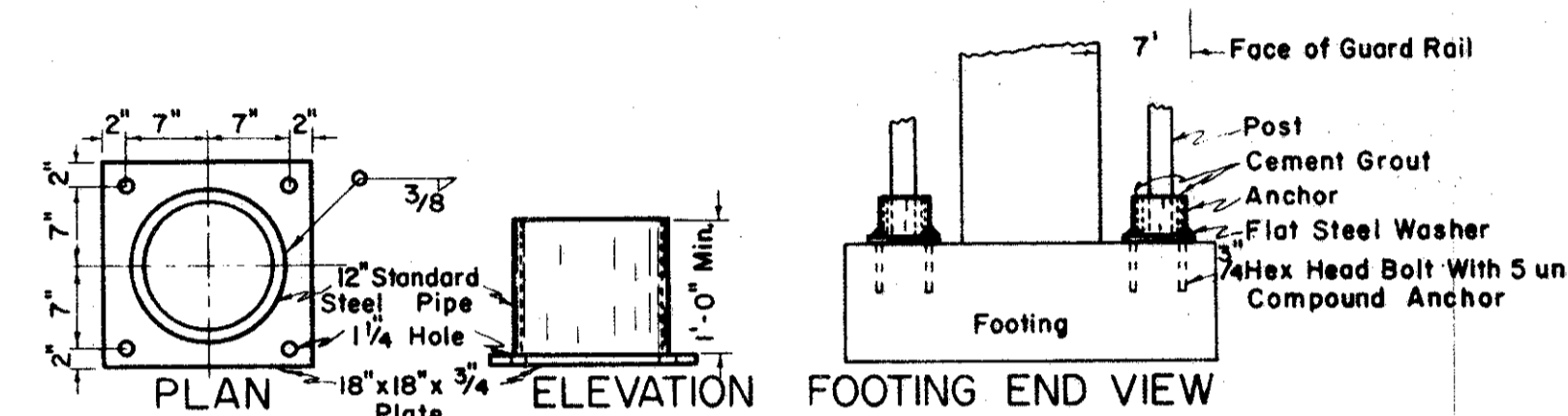
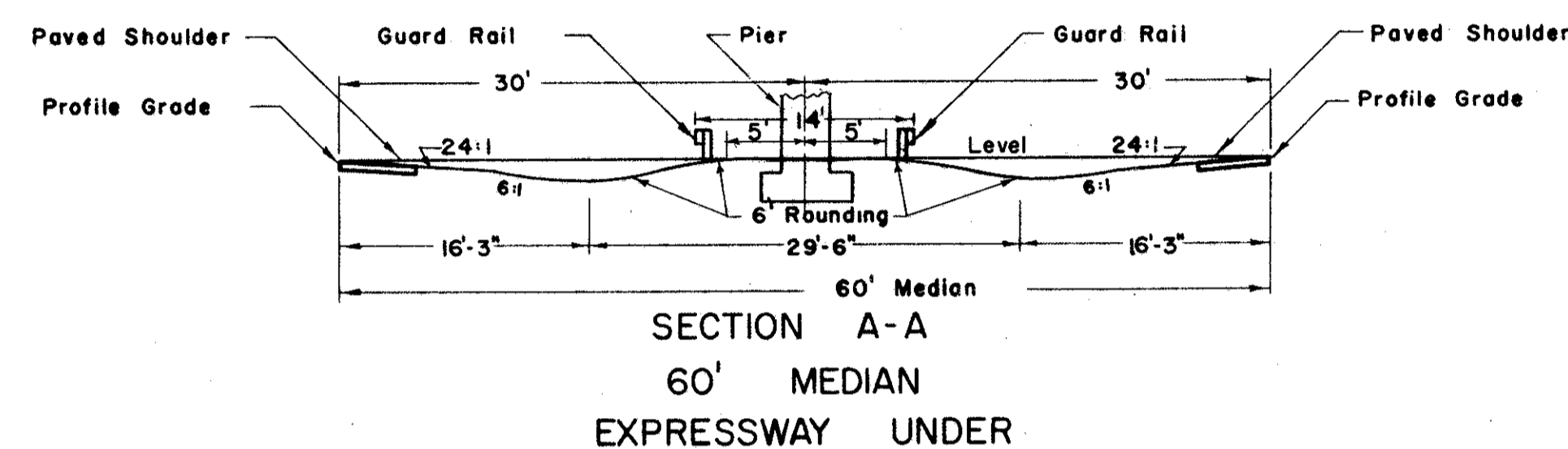
FED. RD. DIVISION	STATE	PROJECT
2	OHIO	F-U-329 (15)

230  
297

LAKE COUNTY  
LAK-2-4.42



Footings to be used where post are over footing and less than 3'-0" of earth is provided above the top of footing.



60' MEDIAN

DISTANCE BETWEEN EDGE OF PAVEMENT AND FACE OF GUARD RAIL			
POST	OFFSET	POST	OFFSET
1/2	6.01	17	15.31
1	6.03	18	16.44
2	6.10	19	17.63
3	6.29	20	18.89
4	6.52	21	20.20
5	6.81	22	21.59
6	7.16	23	23.03
7	7.58	24	24.55
8	8.06	25	26.13
9	8.61	26	27.77
10	9.22	27	29.47
11	9.90	28	31.24
12	10.64	29	33.08
13	11.45	30	34.98
14	12.32	31	36.94
15	13.25	32	39.00
16	14.25		

### NOTE

GENERAL - Design details shown hereon shall govern the construction of guard rail at structures and piers unless otherwise shown on the plans.

DIKE shall be provided at each end of each pair of structures.

Top of rail shall be 24" above profile grade line throughout length of rail.

36' MEDIAN

DISTANCE BETWEEN EDGE OF PAVEMENT AND FACE OF GUARD RAIL			
POST	OFFSET	POST	OFFSET
1/2	6.00	12	10.08
1	6.03	13	10.79
2	6.11	14	11.56
3	6.26	15	12.38
4	6.45	16	13.26
5	6.71	17	14.19
6	7.02	18	15.18
7	7.39	19	16.23
8	7.82	20	17.34
9	8.30	21	18.50
10	8.84	22	19.72
11	9.43	23	21.00