



GW file

TO: SUPERSEDED BY EI 73-085 EFFECTIVE 11/30/1973	 ENGINEERING INSTRUCTION NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Distribution: <input type="checkbox"/> Main Office <input type="checkbox"/> Regions <input checked="" type="checkbox"/> Special	Code: <u>EI-72-104</u>
APPROVED:  <u>Deputy Chief Engineer, Facilities Design</u>	Date: <u>12/29/72</u> Supersedes:

We are submitting herewith transparencies and prints of the subject standard sheet. This is a new sheet and does not supersede any previously issued standard sheets, general letters, or instructions.

Parallel bar grates are hydraulically more efficient than the reticuline type grates and frames shown on Standard Sheet 64-45 or the rectangular type grates and frames shown on Standard Sheets 64-45A, 64-45B, or 65-45C, and should be used when design conditions require them. The design procedure for parallel bar grates will be given in Chapter 8, Small Drainage Structures and Channels of the Highway Design Manual. If it is determined that the parallel bar type grates are required at particular inlets for hydraulic and/or debris reasons, the plans must state that parallel bar type grates and frames are required and no other type of grate will be permitted at that location.

The "Grate Table," in the lower left hand corner of this sheet, shows five groups of sizes of grates with varying bar spacings within each group size. The "Grate Bar Spacing Criteria Table," in the upper left hand corner of this sheet, gives the type of location for each bar spacing.

We have not shown any locking device for these grates as the 1/2" and 1-3/8" spaced bars which would be readily accessible to pedestrians have an approximate minimum weight of 224 pounds and may weight as much as 793 pounds.

MDG:WEH:BS