locations such as a change in grade of the street from positive to negative or at an intersection due to the crown slope of a cross street.

The procedure to define the capacities of standard inlets consists of defining the amount and depth of flow in the gutter and determining the theoretical flow interception by the inlet. To account for effects which decrease the capacity of the various types of inlets, such as debris plugging, pavement overlaying and variations in design assumptions, the theoretical capacity calculated in **Figures 804** through **811** for the inlet capacity should be reduced by the factors presented in **Table 802.**

Allowable inlet capacities for the standard inlets have been developed and are presented in **Figures 804** through 811 for "continuous grade" and **Figures 812** through 814 for "sump" conditions. The allowable inlet capacity is dependent on the depth of flow as determined from the street capacity calculations (for continuous grade inlets) or on the depth of ponding necessary to accept the desired flow rate (sump conditions). These depths must be kept at or below the allowable flow or ponding depths as presented in Section 304.4.

805.1 Inlets on Continuous Grade

For the "continuous grade" conditions **(Figures** 804 through 81 **I),** the capacity of an inlet is dependent upon many factors including gutter slope, depth of flow in the gutter, height and length of curb opening, street cross slope, and the amount of depression at the inlet. In addition, all of the gutter flow will not be intercepted and some flow will continue past the inlet area ("inlet carryover"). The amount of carryover must be included in the drainage facility evaluation as well as in the design of the inlet.

Flow on a street is divided into frontal flow carried by the gutter and side flow carried by the street. Street hydraulic capacity is determined by the street cross slope (S,). The interception of the frontal flow by a grated inlet is determined by the gutter flow velocity, splash velocity, and the length of the grate. Splash velocity is the flow velocity under the grate interference. Regression analyses performed on laboratory data and resulted in an empirical relationship for determining splash-over velocity based on grate length and type. Similar relationships were developed for the interception percentage of side flow. The total flow interception relationships for grated 3 foot long inlets under various water spread widths and street cross slopes are shown in **Figures** 804 through 807. The total interception is the sum of the frontal flow interception and the side flow interception, with a clogging factor.

For curb openings on a grade, the required curb opening length (Lt) for complete interception was also determined empirically. **Figures** 808 through