



Background

- The new TxDOT standard precast curb inlet (Type PCO) consists of a main bay and side extension channels
- For a compact design, the cross-section of the extension channel is significantly smaller than the inlet opening



Problem Statement

- Reduction in cross-section area may decrease the inlet's interception capacity
- Underperforming inlets increase the hazards of flooding and vehicle hydroplaning

Research Objective

Quantify the effects of channel extensions on interception capacity of inlets on-grade and in a sag

- Construct a full-scale physical model of the curb inlet
- Test the model with and without restricted extensions

Methodology



Assessment of Potential Flow Restrictions in Curb-inlets with Channel-extensions Presenter: Muhammad Ashraf

for standard and PCO inlets





- under most conditions

 Increasing the extension connection area of inlets in a sag can potentially increase interception capacity

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