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The information contained in Appendix D: <u>Storm Sewer Policy</u>, dated August 2006, has been updated to reflect the August 2018 Errata. The errata addresses errors, changes in procedure, changes in NDOT department titles, changes in other Roadway Design and Drainage Design Manual chapters and other reference material citations occurring since the latest publication of this chapter.

## STORM SEWER POLICY

**Purpose:** To provide policy clarification for applicable design guidelines and apportionment of costs for highway drainage design and for the upgrade of Municipal Drainage Facilities on projects to be constructed in whole or on part within the corporate limits of a municipality.

## **Definitions:**

Project – A State Highway construction project.

Highway Drainage Facilities – The curb inlets, storm sewers, drainage ditches and other facilities designed to collect and drain waters from the highway and other land. These Highway Drainage Facilities are usually located within the highway right-of-way.

Municipal Drainage Facilities – The storm sewers, drainage ditches, drainageways and other facilities used by the city for the drainage of waters including waters draining from the Highway Drainage Facilities. These Municipal Drainage Facilities are usually located outside of the highway right-of-way.

**Apportionment of Costs:** The State and the Municipality will share all costs associated with the project except for any costs designated herein to be solely the responsibility of the Municipality. The policy regarding the cost sharing on projects of this type is found in the current Department of Roads Operating Instruction 60-11, entitled "Municipal Cost Sharing".

**Highway Drainage Design:** The State will design its' Highway Drainage Facilities to collect and discharge stormwater based on the design guidelines set out in Chapter One of the <u>Drainage</u> <u>Design and Erosion Control Manual</u>, if feasible based on all applicable considerations. When the Highway Drainage Facilities connect or drain into or are intended to connect or drain into the Municipal Drainage Facilities, the State will calculate and notify the Municipality of the capacity of the Municipal Drainage Facilities prevents the State from complying with the design guidelines, and when the Municipality will not upgrade its' Municipal Drainage Facilities, the State will design its' project to collect and discharge stormwater based on the hydraulic capacity of the existing Municipal Drainage Facilities, except for the instances described below.

A. When the Municipality provides the State with reasonable written assurances of a present plan for a future upgrade of its' Municipal Drainage Facilities. The Municipality shall provide the State with the details of its' proposed improvement and the Highway Drainage Facilities will be designed to either match the capacity of the Municipality's proposed drainage facilities or to convey the design event determined by the State to be feasible based on all applicable considerations feasible.

- B. When the Municipality requests that the project include an upgrade of its' Municipal Drainage Facilities to be paid for solely by the Municipality. The Municipality shall enter into an agreement with the State concerning this upgrade of its' facilities prior to the State beginning the design of the project. The Municipality will pay all necessary costs associated with the upgrade of its' Municipal Drainage Facilities, including the costs of engineering, right-of-way and construction.
- C. Examples:

# Example 1:

Given: The project's storm sewer will outlet or drain into an existing municipal storm sewer, located downstream of the project's right-of-way, that can convey a 5-year storm. The Municipality has no plans or desire to upgrade their downstream storm sewer in the foreseeable future.

Result: The project's storm sewer will be designed to convey a 5-year storm, if feasible, based on all applicable considerations.

## Example 2:

Given: The project's storm sewer will outlet or drain into an existing municipal storm sewer, located downstream of the project's right-of-way, that can convey a 5-year storm. The Municipality desires to upgrade their downstream storm sewer to convey a 10-year storm and have it upgraded as a part of the project.

Result: The project's storm sewer will be designed to convey a 10-year storm, if feasible, based on all applicable considerations. The Municipality will be responsible for 100 percent if the costs associated with the upgrade of the storm sewer located downstream of the project.

## Example 3:

Given: The project's storm sewer will outlet or drain into an existing municipal storm sewer, located downstream of the project's right-of-way, that can convey a 5-year storm. The Municipality plans to upgrade their downstream storm sewer to convey a 10-year storm within 8 years of the completion of the project.

Result: After documentation for the future downstream storm sewer upgrade is received from the Municipality, the project's storm sewer will be designed to convey a 10-year storm, if feasible, based on all applicable considerations.

Additional Drainage Waters: If the State determines that significant additional drainage waters will be conveyed in the Highway Drainage Facilities because of the design of the project, the State will determine, on a case-by-case basis, whether the Municipal Drainage Facilities will be upgraded and whether the State will share in any portion of the cost of such upgrade. The extent of the upgrade to the Municipal Drainage Facilities and the division of cost for such upgrade will be a matter of negotiation to be resolved and set forth in an agreement with the Municipality.