Large diameter conduit stormwater systems are often constructed on flat grades and therefore are subject to deposits of sediment and debris. If a blockage occurs in these large conduits, mechanical equipment will be required to remove the material. Maintenance personnel should review design documents and request access shafts large enough to permit entrance of the proper equipment for cleaning the pipe.

The blockage material should be evaluated to identify possible remedial steps to minimize recurrence.

a) Control structure blockages

Floating debris during storm events may restrict control structures. They should be inspected after each significant event and cleaned as necessary to restore them to their original capacity. Control structures should be checked and cleaned at regular intervals of 6 to 12 months, depending on the local conditions.

Each time the structure is cleaned, any structural damage should be noted and scheduled for repair. Some spalling, cracking, and chipping of concrete should be expected and may not be extensive enough to be considered as structural damage. Generally, if reinforcing steel is exposed to corrosion or if displacement has occurred due to cracking, the structure should be repaired.

b) Manhole blockages

Blockages may cause local flooding and possibly damage to other components of the urban stormwater system. These blockages should be removed as expeditiously as is reasonably practicable. If the blockage must be removed while the storm event is in progress, it may be necessary to evacuate the structure by pumping.

In such cases, the capacity of the pump shall exceed the inflow to the structure and a suitable bypass or disposal route shall be established.

c) Flapgate malfunction

Flapgates almost always serve a very critical function on urban stormwater drain systems. If they do not operate as intended, flooding will probably occur. An annual inspection is therefore recommended. If experience indicates no problems, the frequency of inspection can be decreased, but not less than once every 3 years and immediately after reports of malfunction.

d) Failure of other components

In the event of reduced performance of other urban stormwater system components, the correction procedures set forth in the O&M Plan should be applied and should comply with manufacturers' recommendations if applicable.

Procedures should be put in place so that staff can react to failure of major items or have clear ideas on contingency actions. Priorities can be made as follows:

i. Quick assessment of problem – can it be resolved?
ii. Safeguard process – reduce any impact on environment and community
iii. Detailed inspection – formulate plan of action
iv. Mobilize resources – personnel and materials
v. Fix problem
vi. Report on problem and ways to prevent recurrence in future.