



STORM WATER MAINTENANCE POLICY
July 2012

ENGINEERING DEPARTMENT
PUBLIC SERVICE DEPARTMENT

STORM WATER MAINTENANCE POLICY

The City of Kettering is responsible for the operation and maintenance of the City's storm sewer system within the public right-of-way and storm sewer easements.

The maintenance and improvement of private facilities, such as storm sewers, ditches, detention basins, and drainage courses on private property are the responsibility of the affected property owner. Storm drainage facilities shall not be obstructed or altered whereby reducing the capacity for conveying storm water across private property. Any improvements proposed shall conform to the City of Kettering Engineering Department design standards.

It should be recognized by property owners that City personnel are not permitted to perform storm drainage improvements on private property unless the storm facilities comply with City standards and have been accepted by the City for maintenance, and lie within easements dedicated for maintenance purposes.

I. Authority – Codified Ordinances of the City of Kettering, Ohio

Chapter 660.03	Polluting and Diverting Watercourses (ORC 3767.13)
Chapter 660.15	Improper Drainage
Chapter 660.20	Dumping Prohibited in Streams and Public Drains (ORC 6151.14)
Chapter 925.01	Storm Drainage to Sanitary Sewer Prohibited
Chapter 925.02	Disconnection of Existing Drains
Chapter 1104	Flood Damage Prevention
Chapter 1113.25	Storm Sewers
Chapter 1113.26	Open Channels
Chapter 1301.02	Sump Pumps
Chapter 1323.302.2	Grading and Drainage
Chapter 1701	Storm Water Runoff Code

II. Existing System

The storm water conveyance system within the City of Kettering includes 25 miles of open channels, including 478 outfalls; 60 miles of unimproved streets with roadside ditches; and 284 miles of storm sewer pipe, including 7,332 catch basins, 5,115 grate inlets and 5,037 manholes.

III. Maintenance Responsibility

a. Storm sewer system

The storm sewer system, including piping, manholes, catch basins, drip inlets, and inlets and outlets, is cleaned and inspected on a regular basis. Known trouble spots in low-lying areas, culverts in channels, bridge piers and pipe inlets are cleaned routinely after each significant rain event to limit the potential of flooding from debris blockages.

Defective piping, manholes, catch basins and inlets encountered during the inspection process or through calls from citizens and/or the Engineering Department are prioritized and scheduled for adjustment, repair and/or replacement. Such fixes may be completed in-house by maintenance crews or forwarded to the Engineering Department for incorporation into an associated street improvement project.

b. Open channels/Watercourses

Open channels and natural watercourses are inspected and cleaned to remove debris, vegetation, or other obstructions that could contribute to potential flooding. The annual inspection and cleaning program is intended to keep channel bottoms open and flowing, and remedy minor problems such as low hanging limbs and vegetation overgrowth. More significant issues, such as fallen trees, debris jams, and silt buildup near bridges, culverts, and pipe headwalls are prioritized and scheduled for repair. The City, at its discretion, may enter upon private property for public safety purposes to remove obstructions that prevent the free flow of water in a channel or watercourse.

Erosion and/or washout areas on City property are evaluated for repair with gabion baskets, riprap stone or broken concrete. If the erosion problem is encountered on private property, the property owner is notified to correct. Maintaining the vegetation and creek erosion along channel slopes is the responsibility of the affected property owner.

- i. Self-help program: The City of Kettering offers guidance and technical advice to property owners inquiring about damages caused by creek erosion. The following prioritization is used by the City in determining its level of involvement.

**Priority (A):* This designation is for a public facility, such as a bridge, storm sewer, other drainage structures, or roadway that is endangered or threatened by erosion or related flood damage. City crews will respond to such problems within the right-of-way or public easement.

**Priority (B):* Problems affecting private property to the extent that a permanent building or structure is endangered or threatened. The property owner is encouraged to remedy the problem at own expense with technical assistance from the City.

**Priority (C):* Erosion affecting private property, such as fences, lawns, etc. The property owner is required to remedy the problem at own expense.

c. Bridges/Roadway culverts

Bridge piers and roadway culverts are inspected and cleared of debris, brush and other materials from under, within and around the public structures. The immediate upstream and downstream areas within the right-of-way or drainage easement are maintained as part of this effort.

d. Detention basins

i. Private detention basins: Homeowners' Associations (HOA's) are responsible for the annual inspection and maintenance of private detention basins.

ii. Detention basins in City parks and on City-owned property: The Parks, Recreation, and Cultural Arts Department is responsible for the day-to-day maintenance of detention ponds located within City parks and City-owned property. If significant improvements to a City-maintained detention basin are necessary, the work shall be managed and coordinated by the Engineering Department, and either performed by the Public Service Department or by an outside contractor hired by the City.

e. Roadside ditches/Driveway culverts (unimproved streets)

Roadside ditches are inspected and cleaned simultaneously as part of our storm sewer inspection and cleaning program. Typically, sections of ditchline that have silted in over the years will be re-graded upon request of the property owner and/or the Engineering Department. If surveying is required to set grade, the Engineering Department will assist with this effort.

Private storm sewer pipe and driveway culverts encountered on unimproved streets will not be inspected, cleaned or maintained by City personnel. Property owners may petition the City for roadway improvements whereby public storm sewers will be installed and maintained by the City. The cost for

the installation of public storm sewers may be assessed to the property owners petitioning for their installation.

f. Downspout and sump pump tie-ins

Where storm sewers are available to the abutting property, property owners may run drainage pipe from downspouts and/or sump pumps to a catch basin for connection by City personnel. This pipe is considered private and the responsibility of the property owner from the house to the catch basin. By law, downspouts, sump pumps, or other storm drainage outlets are prohibited from being connected to the sanitary sewer system. Such drainage outlets are also prohibited from being discharged upon a sidewalk or into curb and gutter, where such connection creates a public nuisance.

IV. **Permits**

a. Right-of-Way permit

Any work performed by a private entity in the right-of-way requires a permit from the Engineering Department.

b. Private detention basin permit

HOA's with detention basins are required to obtain an annual permit to document the basin operation and maintenance activities. Permits may be obtained from the Engineering Department

c. Building permit (site plan)

Any improvement or alteration to a drainage course or permanent structure on private property may require a building permit with an associated site plan showing the proposed scope of work. Any improvement or alteration to a drainage course shall be reviewed and approved by the Engineering Department. Permits may be obtained from the Planning & Development Department.

V. **Drainage Complaints**

a. All drainage complaints should first be directed to the Engineering Department for inspection. High water/flooding complaints in or along roadways may be directed to Streets Maintenance for investigation and correction.

i. An Engineering inspector is the first line of contact after a complaint is made. However, once an inspection is made, the name of a city contact person involved in the resolution of the problem may be changed.

ii. When the calls are initially handled, care should be taken to not promise that the problem will be resolved by the city since many

drainage problems turn out to be only neighborhood disputes which may need to be resolved as a civil matter between property owners.

- b. The property (or properties) involved in the complaint are inspected by Engineering staff, and one of the following responses are made:
 - i. Engineer or inspector resolves the problem. This is normally accomplished by giving advice or directing the offending property owner in methods to correct the problem.
 - ii. A neighborhood dispute is discovered. These problems are common, and often can be resolved if the two neighbors talk before involving the city. Most of these drainage disputes are resolvable without civil action. However, if the problem persists, a civil remedy could be undertaken by one or both of the two sides (but not by the city).
 - iii. A problem requiring city/public action is discovered. These problems may involve one or more of the following city departments or public agencies: Planning and Development, Street Department, Montgomery County Water Services, or the Combined Health District. The engineer or inspector contacts the appropriate city department or public agency to involve them in resolving the problem.
- c. In some instances, where chronic complaints have been received on a property but no city involvement is appropriate, city staff may decide not to inspect the property unless the problem is new or a new property owner (either complainant or offending party) is discovered. The goal is to involve both sides in a dialogue prior to a lot of city involvement.
- d. Since many drainage complaints are perception problems which do not require any significant city or public action, training and public education may be warranted to assist the complainant.

The City Manager hereby delegates the appropriate responsibility and authority to administer this Policy to the City's Assistant City Managers and Department Directors.

Approved:

9/11/2013
Date

Mark Schwieterman
Mark Schwieterman
City Manager

Issued:

9-11-2013
Date

David Duritsch
David Duritsch
Public Service Director

9/11/13
Date

Steve Bergstresser
Steve Bergstresser
Engineering Director

**APPENDIX A
POLICY MEMORANDUMS
(FOR REFERENCE ONLY)**

The attached memos are for historical purposes only to document the development of the City of Kettering storm water maintenance policies, and do not necessarily represent current practices.

- | | |
|------------------------------------|----------------|
| • Maintenance of Creek Erosion | April, 1975 |
| • Safety Hazards – Springs | April, 1976 |
| • Minor Backyard Drainage Problems | No Date |
| • Driveway Culvert Pipe | March 1977 |
| • Installation of Drain Tile | September 1977 |
| | April, 1978 |
| • Drainage Complaints | March 1990 |

M E M O

TO:
FROM: Engineering Division & Street Division
DATE: April , 1975
SUBJECT: Maintenance Of Creek Erosion

To offer guidance to those involved in investigating service request for damages caused by creek erosion, the following system of priorities is being proposed. It is recognized that further discussion and expansion of this subject is necessary. Refinements will be undertaken as time permits.

PRIORITY (A) - HIGHEST PRIORITY

This designation will be given to any situation where a public facility, such as a bridge, storm sewer, other drainage structures, or roadway is endangered or threatened by erosion or related flood damage.

PRIORITY (B)

Problems affecting private property to the extent that a permanent building is endangered or threatened, will be placed in this category. The owner will be encouraged to remedy the problem at his own expense.

PRIORITY (C)

Erosion affecting private property, such as fences, lawns, etc. will be placed in this priority.

Due to limited manpower and the large number of existing and potential problems of this nature, the city will offer no assistance other than advice.

Removal of debris, vegetation, structures, etc. which could or do contribute to erosion problems is an "on-going" program. Work will be performed on a routine maintenance basis except where emergency conditions are encountered.

Legal advice will be requested to resolve questions of City responsibility concerning the various problems encountered. It is assumed, until further refinement is possible, the above priorities apply only to waterways which are publicly owned or within public easements.

SAFETY HAZARD - SPRINGS

The following is a suggested procedure for alleviating problems caused by water flowing from springs onto public right of way.

- * If the property owner buys the pipe, the city will install the section in the right of way and connect it to an outlet. All repairs in the R/W will be made by the City. The owner must then complete the installation. Minimum 6" pipe with sealed joints will be required for R/W portion.
- * If property owner refuses to cooperate in solving problem, the City will initiate assessment procedures with maximum permissible cost being charged to owner.
- * Acceptable pipe material for installation in R/W:

PVC plastic pipe
Corrugated metal

This policy would apply only when an adequate outlet is available within a reasonable distance.

4/8/76

ENGINEERING SERVICE

FOR

MINOR BACKYARD DRAINAGE PROBLEMS

Where a group of neighbors, or one resident, has a minor drainage problem on their property, the Engineering Division will survey and develop a solution for them. The procedure for handling requests of this nature is as follows:

1. Receive request for assistance
2. Meet with residents, review problem
3. If applicable, survey area
4. Design solution, prepare plan
5. Present to residents

If the solution requires installation of a pipe in the Right of Way and the residents are going to do the work themselves, the Street Division may be able to help by connecting the pipe to an outlet. The Street Division should be consulted before advising the residents.

ENGINEERING DIVISION GUIDELINES

DRIVEWAY CULVERT PIPE

Proposed or existing drive approaches where drainage is required should be constructed according to this criteria. However, unusual circumstances such as topography, time, location, use, etc. may influence the selection of materials and size. Under these conditions the best possible design should be determined.

- * The size of pipe used should be determined by proper hydraulic analysis. However, the minimum size should not be less than 12".
- * The "strength" of the pipe should be sufficient to carry the anticipated loads.
- * Headwalls are an optional item.
- * Only concrete or corrugated pipe should be used.

If the Street Division is to be involved in the installation of the culvert pipe, they should review and approve the proposed plans. Sufficient time should be allowed for them to conveniently schedule their operation to include this work.

JTS:jh
3/28/77

Bm

M E M O R A N D U M

TO: STREET DIVISION STAFF

September 16, 1977

FROM: JOSEPH D. WANAMAKER

SUBJ: INSTALLATION OF DRAIN TILE

In the future our policy on this will be to install tile only under driveways. Everyone of these projects must be investigated and checked out by a Street Foreman or Supervisor before the citizen is given the go ahead to purchase tile.

All other projects where citizens want to lay tile in the ditch areas in front of their property to alleviate a drainage problem or create a parking space must be coordinated with Engineering. Under no circumstances should a foreman give the property owner the o.k. to purchase tile without following the procedures outlined in this memo.

J. W.
JOSEPH D. WANAMAKER
Street Superintendent

JDW:vld

cc: J. T. Stabler

M E M O R A N D U M

CULVERT ROUTE

TO: Joe Wanamaker, Street Superintendent
FROM: Tom Stabler, City Engineer
SUBJECT: Installation of Drain Tile
DATE: July 3, 1978

To clarify our current guideline on the installation of drain tile in the Right of Way, I offer the following:

1. The Street Division does not generally install pipe under driveways or in other areas of the Right of Way. The old guideline where the property owner bought the pipe and the City installed it is no longer in effect.
2. The Street Division may install drain tile in the Right of Way in those circumstances where the City will benefit from the installation. The Street Division will have final approval of this type work.
3. The City will still install drain tile when springs are encountered as per the attached procedure.
4. The Street Division will install drain tile in the Right of Way area where the City is involved in surveying and advising property owners on methods to solve backyard and similar type flooding problems. See attached.
5. The Engineering Division processes applications for work in the Right of Way and will consult with the Street Division as needed.
6. These guidelines are flexible and consideration of special conditions may indicate Street Division physical involvement would be desirable.

J. T. Stabler

JTS:je

City of Kettering



MEMORANDUM

DATE: MARCH 16, 1990

TO: ENGINEERS *af*
INSPECTORS
CLERICAL

FROM: CITY ENGINEER

SUBJECT: DRAINAGE COMPLAINTS

A meeting between Engineering and Development Services Staff was held on March 15, 1990 to clarify which department will handle what drainage complaints.

It was established in that meeting that in general ALL drainage complaints (whether involving private property or right-of-way) will be taken and investigated by Engineering first and if necessary we will involve Development Services personnel after we have investigated the complaint. The consensus was to centralize drainage complaints in order to avoid overlap of work and cut red tape.

Development Services and Engineering personnel will make an effort to screen incoming calls using a checklist approach. Hopefully some complaints will be resolved over the phone and will not require a follow-up. In the screening process, Development Services will handle complaints involving sump pumps, structural or other problems requiring their expertise.

In matters where complaints are totally on private property, from a public relations standpoint, we will offer as much advice as possible but will NOT act as a contractor.

We should not be going out year after year on the SAME private drainage complaints, if you recognize a complaint, we will check the file, research what has happened previously and send a letter to the property owner stating the limitations to our helping them and their final responsibility for resolving the matter.

JTS:je

cc: File and Desk
Development Services
Switchboard

ME310316.0J