

ARTICLE VII. - STORMWATER DRAINAGE

DIVISION 1. - GENERALLY

FOOTNOTE(S):

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Editor's note— Section 1 of Ord. No. 14-03, adopted June 2, 2014, amended div. 1 in its entirety to read as herein set out. Former div. 1, §§ 37-150—37-153, pertained to similar subject matter, and derived from Ord. No. 07-01, § 1, adopted Feb. 5, 2007.

Sec. 37-150. - Statutory authority and title.

This article shall be known and may be cited as the City of Grand Haven's Stormwater Design and Management Ordinance. It is adopted in accordance with the Home Rule City Act, as amended, being MCL 117.1 et seq.; the Drain Code of 1956, as amended, being MCL 280.1 et seq.; the Land Division Act, as amended, being MCL 560.1 et seq.; the Revenue Bond Act, as amended, being MCL 141.101 et seq.; and the Natural Resources and Environmental Protection Act, as amended, being MCL 324.101 et seq.; Section 401(p) of the Federal Water Pollution Control Act (also known as the Clean Water Act), as amended, being 33 USC 1342(p) and 40 CFR Parts 9, 122, 123 and 124; and other applicable state and federal laws.

(Ord. No. 14-03, § 1, 6-2-14)

Sec. 37-151. - Findings.

The City of Grand Haven finds that:

- (1) Water bodies, roadways, structures, and other property within, and downstream of the city are at times subjected to flooding;
- (2) Flooding is a danger to the lives and property of the public and is also a danger to the natural resources of the city and the region;
- (3) Land development alters the hydrologic response of watersheds, resulting in increased stormwater runoff rates and volumes, increased flooding, increased stream channel erosion, and increased sediment transport and deposition;
- (4) Stormwater runoff produced by land development contributes to increased quantities of water-borne pollutants;
- (5) Increases of stormwater runoff, soil erosion, and non-point source pollution have occurred as a result of land development, and cause deterioration of the water resources of the city and downstream municipalities;
- (6) Stormwater runoff, soil erosion, and non-point source pollution, due to land development within the city, have resulted in a deterioration of the water resources of the city and downstream municipalities;
- (7) Increased stormwater runoff rates and volumes, and the sediments and pollutants associated with stormwater runoff from future development projects within the city will, absent reasonable regulation and control, adversely affect the city's water bodies and water resources, and those of downstream municipalities;
- (8) Stormwater runoff, soil erosion, and non-point source pollution can be controlled and minimized by the regulation of stormwater runoff from development;

- (9) Adopting the standards, criteria and procedures contained in this article and implementing the same will address many of the deleterious effects of stormwater runoff;
- (10) Adopting these standards is necessary for the preservation of the public's health, safety and welfare.

(Ord. No. 14-03, § 1, 6-2-14)

Sec. 37-152. - Purpose.

It is the purpose of this article to establish minimum stormwater management requirements and controls to accomplish, among others, the following objectives:

- (1) To reduce artificially induced flood damage;
- (2) To minimize increased stormwater runoff rates and volumes from identified new land development;
- (3) To minimize the deterioration of existing watercourses, culverts and bridges, and other structures;
- (4) To encourage water recharge into the ground where geologically favorable conditions exist;
- (5) To prevent an increase in non-point source pollution;
- (6) To maintain the integrity of stream channels for their biological functions, as well as for drainage and other purposes;
- (7) To minimize the impact of development upon stream bank and stream bed stability;
- (8) To reduce erosion from development or construction projects;
- (9) To preserve and protect water supply facilities and water resources by means of controlling increased flood discharges, stream erosion, and runoff pollution; and
- (10) To reduce stormwater runoff rates and volumes, soil erosion, and non-point source pollution, wherever practicable, from lands that were developed without stormwater management controls meeting the purposes and standards of this article.

(Ord. No. 14-03, § 1, 6-2-14)

Sec. 37-153. - Definitions.

For the purpose of this article, the following words and phrases shall have the following meanings, unless the context in which they are used specifically indicates otherwise:

Adequate emergency overland flow-ways. Stormwater conveyance systems are usually designed to handle flows generated by the ten-year storm. When larger storms generate higher flows, the conveyance system is expected to surcharge resulting in stormwater accumulating on the surface of the ground. Gravity will cause such stormwater to flow overland to lower elevations. By carefully managing the shape of the land surface, such overland stormwater flow can be directed to locations that will not cause property damage. Adequate emergency overland flow-ways will direct stormwater flows generated by the 100-year storm to avoid damage to structures and facilities.

Authorized enforcement officer means the city manager and/or any persons or representatives designated by the city manager to act as the authorized enforcement officer.

Base flood means a flood having a one-percent chance of being equaled or exceeded in any given year.

Base flood elevation means the high water elevation of the base flood commonly referred to as the "100-year flood elevation".

Base floodplain means the area inundated by the base flood.

Best management practices (BMPs) means a practice, or combination of practices and design criteria, that accomplishes the purposes of this article (including, but not limited to, reducing stormwater runoff rates, reducing stormwater runoff volume, and reducing the amount of pollutants in stormwater) as determined by the city and, where appropriate, the standards of the Ottawa County Drain Commissioner.

Building opening means any opening of a solid wall such as a window or door, through which floodwaters could penetrate.

City means the City of Grand Haven or an authorized enforcement officer.

Construction site stormwater runoff means stormwater runoff from a development site following an earth change and before final site stabilization.

Detention means the practice of managing stormwater runoff to prevent downstream flooding by directing stormwater runoff to a storage area for a limited period of time. Storage may be accomplished by surface impoundments such as dry ponds, wet ponds, holding ponds, dry detention basins, wet detentions basins, etc., or by subsurface chambers or reservoirs. Detention facilities are characterized by limiting the discharge rate to a design level and by having zero or incidental infiltration. To enhance the water quality performance, detention facility designs may include a forebay, multiple cells, or constructed wetlands.

Detention system means a system which is designed to capture stormwater and release it over a given period of time through an outlet structure at a controlled rate.

Developer means any person or entity proposing or implementing the development or redevelopment of land.

Development project means a project involving the installation or construction of buildings, structures, pavement, or other impervious surfaces on a site. The term "development project" includes redevelopment projects, and also includes projects performed over several phases when it is reasonably apparent that the phases are part of a common plan.

Directly connected impervious area means the area of a development site that is covered by a building, pavement, or other impervious surface that drains directly to a stormwater drainage system. It may be possible to disconnect an impervious area from the drainage system by directing stormwater runoff to a permeable area.

Discharge means the introduction (intentionally or unintentionally, and directly or indirectly) of any liquid, substance, pollutant, or other material into a stormwater drainage system or water body.

Discharger means any person or entity that directly or indirectly discharges stormwater from any property. Discharger also includes any employee, officer, director, partner, contractor, or other person who participates in, or is legally or factually responsible for, any act or omission that is, or results in, a violation of this article.

Disturbed pervious area means that portion of a development site that is not covered by a building, pavement, or other impervious surface, but has been altered by earth changes or removal of vegetation.

Drain means any drain as defined in the Drain Code of 1956, as amended, being MCL 280.1 et seq.

Drainage means the collection or conveyance of stormwater, groundwater and/or surface water.

Drainage way means the area within which surface water or groundwater is conveyed from one part of a lot or parcel to another part of the lot or parcel, or to adjacent land or to a watercourse.

Earth change means any human activity which removes ground cover, changes the slope or contours of the land, or exposes the soil surface to the actions of wind and rain. Earth change includes, but is not limited to, any excavating, surface grading, filling, landscaping, or removal of vegetative roots.

EPA means the United States Environmental Protection Agency.

Exposed surface means the surface in any given location that is most likely to be the first contact point for rain water. For example, the exposed surface in an empty field is grass, the exposed surface on

a building site is the roof, and the exposed surfaces where a tree is planted are the branches and leaves of the tree.

Extended detention means the practice of managing stormwater runoff to prevent downstream flooding, bank erosion, and water quality impairment by directing stormwater runoff to a storage area for at least a specified period of time (e.g. twenty-four (24) hours). Storage may be accomplished by surface impoundments such as dry ponds, wet ponds, holding ponds, dry detention basins, wet detention basins, etc. or by subsurface chambers or reservoirs. Detention facilities are characterized by limiting the discharge rate to a design level and by having zero or incidental infiltration. To enhance the water quality performance, detention facility designs may include a forebay, multiple cells, or constructed wetlands.

Federal Emergency Management Agency (FEMA) means the agency of the federal government charged with emergency management.

Flood protection elevation (FPE) means the base flood elevation plus one foot at any given location.

Floodway means the channel of a river or stream and the portions of the floodplain adjoining the channel that are reasonably required to carry and discharge a 100-year flood.

Grading means any stripping, excavating, filling, and stockpiling of soil or any combination thereof.

Illicit connection means any method, means, or conduit for conveying an illicit discharge into a water body or a stormwater drainage system.

Illicit discharge means any discharge to a water body or a stormwater drainage system that does not consist entirely of stormwater, that is not authorized by the terms of an NPDES permit, or that is not an authorized discharge as defined by this article.

Impervious surface means any surface that does not allow stormwater to percolate into the ground.

Limited conveyance system (storm sewer or ditch) capacity means all methods of moving stormwater have a limited capacity based primarily upon cross-section area and slope. Pumped conveyance systems, obviously, are limited by pump and pipeline capacity. Where public conveyance systems are utilized by multiple properties, each property has a limited conveyance system capacity based upon an equitable distribution of total capacity among the various tributary properties.

Local floodplain means any land area subject to periodic flooding as determined by the local government.

Lowest floor means the lowest floor or the lowest enclosed area (including a basement), but not including an unfinished or flood-resistant enclosure which is usable solely for parking of vehicles or building access.

Maximum release rate means detention facilities and extended detention facilities are typically designed to limit the rate of discharge to a maximum release rate based on the size of the drainage area and the intensity of the storm event.

Michigan Low Impact Development (LID) Manual. This manual provides communities, agencies, builders, developers, and the public with guidance on how to apply LID to new, existing, and redevelopment sites.

MDEQ means Michigan Department of Environmental Quality, or its successor agency.

MDNRE means Michigan Department of Natural Resources and Environment.

Ninety-percent annual non-exceedance storm. For Ottawa Counties, Michigan, the ninety-percent annual non-exceedance storm is equivalent to 1.0 inch of rainfall. That is, only ten (10) percent of all storms in a given year would be expected to exceed 1.0 inch of rainfall. A BMP sized to capture and treat the 1.0 inch rainfall will effectively treat ninety (90) percent of the annual average rainfall.

NPDES means National Pollutant Discharge Elimination System.

OCDC means Ottawa County Drain Commission.

Overland flow-way means surface area that conveys a concentrated flow of stormwater runoff.

Person means an individual, firm, partnership, association, public or private corporation, public agency, instrumentality, or any other legal entity.

Pollutant means a substance discharged which includes, but is not limited to the following: any dredged spoil, solid waste, vehicle fluids, yard wastes, animal wastes, agricultural waste products, sediment, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological wastes, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, commercial and agricultural waste, or any other contaminant or other substance defined as a pollutant under the Clean Water Act.

Poorly draining soils means a condition in which water moves through the soil so slowly that the soil is saturated periodically during the growing season or remains wet for long periods (e.g. greater than seven (7) days).

Predevelopment runoff rate means the rate at which water, in gallons per minute or cubic feet per second, is generated by a particular storm event calculated for a particular area of a development site utilizing the existing (i.e., predevelopment) land uses. This term is distinct from "presettlement" runoff rate which would consider land uses existing prior to human habitation (forest or meadow).

Predevelopment runoff volume means the amount of water, in gallons or cubic feet, generated by a particular storm event calculated for a particular area of a development site utilizing the existing (i.e., predevelopment) land uses. This term is distinct from "Pre-settlement" runoff volume which would consider land uses existing prior to human habitation (forest or meadow).

Property owner means any person having legal or equitable title to property or any person having or exercising care, custody, or control over any property.

Redevelopment means a plan involving the construction, modification, or demolition/replacement of buildings, structures, or other surfaces on a developed parcel of land. Redevelopment does not include interior renovations to a building or structure having no effect on exterior impervious surfaces, and does not include roof replacement or repavement so long as like materials are used.

Retention means the practice of managing stormwater runoff to prevent downstream flooding, bank erosion, and water quality impairment by causing runoff to infiltrate through permeable soils into the groundwater. Retention may be accomplished by infiltration basins, subsurface infiltration chambers, grassy swales, and rain gardens, among other facilities. To a lesser degree, retention may be accomplished through evaporation, transpiration, and stormwater reuse. Retention facilities are distinguished from detention facilities by their design to have no discharge of stormwater up to a specified design storm event.

State of Michigan Water Quality Standards means all applicable state rules, regulations, and laws pertaining to water quality, including the provisions of Section 3106 of Part 31 of 1994 PA 451, as amended.

State-regulated floodplain means any area of land adjoining a river or stream that will be inundated by a base flood that has a drainage area of two (2) square miles or more.

Storm drain means a system of open or enclosed conduits and appurtenant structures intended to convey or manage stormwater runoff, groundwater and drainage.

Stormwater means water that originates during precipitation events or with snowmelt.

Stormwater drainage system means storm sewers, conduits, curbs, gutters, catch basins, drains, ditches, pumping devices, parking lots, roads, or other manmade channels that are designed or used, singly or together in combination with one another, for collecting or conveying stormwater.

Stormwater permit means a permit issued pursuant to this article.

Stormwater runoff means stormwater that either flows directly into surface waters or is channeled into storm drainage systems.

Stormwater treatment for runoff means a process for reducing the total suspended solids of stormwater discharges from what would be discharged with untreated runoff. Treatment may be provided by sedimentation, filtration, retention, solids separation, bio-retention, or bio-filtration.

Stormwater management facility means the method, structure, area, system, or other equipment or measures which are designed to receive, control, store, convey, infiltrate, or treat stormwater.

Stream means a river, stream or creek which may or may not be serving as a drain, or any other water body that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water.

Toxic material means any pollutant or combination of pollutants that is or can potentially be harmful to the public health or the environment, including, without limitation, those listed in 40 CFR 401.15 as toxic under the provisions of the Clean Water Act, or listed in the Critical Materials Register promulgated by the Michigan Department of Environmental Quality, or as otherwise provided by local, state, or federal laws, rules, or regulations.

Total suspended solids. Total suspended solids is a water quality measurement usually abbreviated TSS and expressed in mg/L. It is listed as a conventional pollutant in the U.S. Clean Water Act. The term refers to the dry-weight, in milligrams (mg), of particles in a liter (L) of water that are trapped by a filter. This parameter is also called non-filterable residue. See federal regulations 40CFR136 (Residue—non-filterable (TSS), mg/L) and Procedure 2540 D in Standard Methods for the Examination of Water and Wastewater, 19th Edition, 1995, APHA, AWWA, WEF.

Twenty-five-year rainfall event means a rainfall event which has a four-percent chance of occurring in any given year. For stormwater management it is often convention to consider the twenty-four-hour storm events. For Ottawa Counties, Michigan, the twenty-five-year, twenty-four-hour rainfall event is equivalent to 4.45 inches of rain in twenty-four (24) hours.

Two-year, twenty-four-hour rainfall event means a rainfall event which has a fifty-percent chance of occurring in any given year. For stormwater management it is often convention to consider the twenty-four-hour storm events. For Ottawa Counties, Michigan, the two-year, twenty-four-hour rainfall event is equivalent to 2.37 inches of rain in twenty-four (24) hours. This rainfall event is considered to be the upper limit of the events that shape and influence streambank erosion the most in small streams.

Wastewater means any water or other liquid, other than uncontaminated stormwater, discharged from a premises. The term includes any water that has in any way been used and degraded or physically or chemically altered.

Water body means a river, lake, stream, creek or other watercourse or wetlands.

Watershed means a land area draining into a water body.

Wetlands means land characterized by the presence of water at a frequency and duration sufficient to support wetland vegetation or aquatic life.

(Ord. No. 14-03, § 1, 6-2-14)

DIVISION 2. - GENERAL PROHIBITIONS AND ENFORCEMENT

FOOTNOTE(S):

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Editor's note— Section 2 of Ord. No. 14-03, adopted June 2, 2014, combined former divs. 2—5, §§ 37-154—37-171, into a single div. 2 as set out herein.

Sec. 37-154. - Applicability.

This division shall apply to all discharges to the stormwater drainage system and water bodies from any developed and undeveloped lands.

(Ord. No. 07-01, § 1, 2-5-07; Ord. No. 14-03, § 3, 6-2-14)

Editor's note—

Section 3 of Ord. No. 14-03, adopted June 2, 2014, changed the title of § 37-154 from "Prohibited discharges" to "Applicability."

Sec. 37-155. - Prohibited discharges and illicit connections.

- (a) It is unlawful for any person to discharge, or cause to be discharged, to a stormwater drainage system or water body any substance or material, including, but not limited to, pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than stormwater or an authorized discharge. This prohibition includes the commencement, conducting, or continuance of any illicit discharge by any person to a stormwater drainage system or water body.
- (b) Any person discharging stormwater shall effectively prevent pollutants from being discharged with the stormwater, except in accordance with BMPs.
- (c) The authorized enforcement officer is authorized to require dischargers to implement pollution prevention measures, using stormwater pollution prevention plans and BMPs, as determined necessary by the authorized enforcement officer to prevent or reduce the discharge of pollutants to a stormwater drainage system or water body.
- (d) The discharge prohibitions of this section shall not apply to any non-stormwater discharge authorized under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the EPA, provided the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the stormwater drainage system.
- (e) It is unlawful for any person to construct, use, maintain (or to allow the construction, use, maintenance or continued existence of) an illicit connection. This prohibition expressly includes, without limitation, illicit connections made prior to the effective date of this article, and regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(Ord. No. 07-01, § 1, 2-5-07; Ord. No. 14-03, § 3, 6-2-14)

Editor's note—

Section 3 of Ord. No. 14-03, adopted June 2, 2014, changed the title of § 37-155 from "Prohibited illicit connections" to "Prohibited discharges and illicit connections."

Sec. 37-156. - Authorized discharges.

The following non-stormwater discharges are permissible, but only if they do not result in a violation of State of Michigan Water Quality Standards and provided that they are undertaken in compliance with any applicable or required BMPs:

- (1) Water supply line flushing.
- (2) *De minimis* landscape irrigation runoff.
- (3) Diverted stream flows.
- (4) Rising groundwater.

- (5) Uncontaminated groundwater infiltration to storm drains.
- (6) Uncontaminated pumped groundwater.
- (7) Discharges from potable water sources.
- (8) Foundation drains.
- (9) Air conditioning condensate.
- (10) *De minimis* irrigation water.
- (11) Springs.
- (13) Water from crawl space pumps.
- (14) Footing drains and basement sump pumps.
- (15) *De minimis* lawn watering runoff.
- (16) Waters from non-commercial car washing.
- (17) Flows from riparian habitats and wetlands.
- (18) Residential swimming pool water and other dechlorinated swimming pool water, provided that any filter backwash water that is present is treated.
- (19) Residual street wash water.
- (20) Discharges or flows from emergency fire fighting activities.
- (21) Discharges specifically authorized in writing by the authorized enforcement officer as being necessary to protect public health, welfare, and safety or the environment.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-157. - Storage of hazardous or toxic materials in drainageway.

Except as permitted by law, it shall be unlawful for any person to store or stockpile, within a drainage way, any hazardous or toxic materials, unless adequate protection and/or containment has been provided so as to prevent any such materials from entering a stormwater drainage system or water body.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-158. - Inspection and sampling.

The authorized enforcement officer may inspect and/or obtain samples from any discharger's premises as necessary to determine compliance with the requirements of this article. Upon request, the discharger shall allow properly identified representatives of the authorized enforcement officer to enter the premises of the discharger at all hours reasonably necessary for the purposes of such inspection or investigation, including, but not limited to, smoke/dye testing, televising pipes, sampling, and excavation. The authorized enforcement officer shall provide the discharger reasonable advance notice of the need for such access, if possible and consistent with protection of public health and safety and the environment. The authorized enforcement officer may place on the discharger's premises the equipment or devices used for such sampling or inspection. Unreasonable delay in allowing access to a premises is a violation of this article.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-159. - Stormwater monitoring facilities.

If directed in writing to do so by the authorized enforcement officer, a discharger from any premises used for commercial or industrial purposes shall provide and operate equipment or devices for monitoring stormwater runoff to provide for inspection, sampling, and flow measurement of each discharge to a water body or a stormwater drainage system, as specified by the authorized enforcement officer. The

authorized enforcement officer may require a discharger to install and operate such equipment and devices as necessary for inspecting, sampling, and measuring the flow of discharges to determine whether adverse effects may result from such discharges. All such equipment and devices for the inspection, sampling, and flow measurement of discharges shall be installed and maintained at the discharger's expense in accordance with applicable laws, ordinances, rules and regulations.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-160. - Accidental discharges.

Any discharger who accidentally discharges into a stormwater drainage system or a water body any substance other than stormwater or an authorized discharge shall immediately notify the authorized enforcement officer of the discharge. If the notification is given orally, a written report concerning the discharge shall be filed with the authorized enforcement officer within five (5) calendar days. The written report shall specify all of the following:

- (1) The composition of the discharge and the cause thereof.
- (2) The exact date, time, and estimated volume of the discharge.
- (3) All measures taken to clean up the discharge, all measures taken or proposed to be taken to mitigate any known or potential adverse impacts of the discharge, and all measures proposed to be taken to reduce and prevent any recurrences.
- (4) The names and telephone numbers of the individual(s) making the report, and, if different, the individual(s) who may be contacted for additional information regarding the discharge.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-161. - Record keeping.

Any person that violates any requirement of this article or that is subject to monitoring under this article shall retain and preserve for no less than three (3) years any and all books, drawings, plans, prints, documents, memoranda, reports, correspondence, and records, including records on magnetic or electronic media, and any and all summaries of such records relating to monitoring, sampling, and chemical analysis of any discharge or stormwater runoff from any premises connected with the violation or subject to monitoring.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-162. - Remedies and penalties for violation.

- (1) Except as provided subsection (6) below, a person who violates any provision of this article or any notice, order, permit, decision or determination promulgated, issued or made by the authorized enforcement officer under this article is responsible for a municipal civil infraction, subject to payment of a civil fine of not less than one thousand dollars (\$1,000.00) per day for each infraction and not more than ten thousand dollars (\$10,000.00) per day for each infraction, plus costs and other sanctions.
- (2) Increased fines may be imposed for repeat offenses. As used in this section, "repeat offense" means a second (or any subsequent) municipal civil infraction violation of the same requirement or provision of this article (i) committed by a person within any twelve-month period and (ii) for which the person admits responsibility or is determined to be responsible. The increased fine for a repeat offense under this article shall be as follows:
 - (a) The fine for any offense that is a first repeat offense shall be not less than two thousand five hundred dollars (\$2,500.00), plus costs.
 - (b) The fine for any offense that is a second repeat offense or any subsequent repeat offense shall be not less than five thousand dollars (\$5,000.00), plus costs.

- (3) Subject to the minimum fine amounts specified in subsections (1) and (2) above, a court shall consider the following in determining the amount of a fine for a violation of this article: the type, nature, severity, frequency, duration, preventability, potential and actual effect, and economic benefit to the violator (such as delayed or avoided costs or competitive advantage) of a violation; the violator's recalcitrance or efforts to comply; the economic impacts of the fine on the violator; and such other matters as justice may require. A violator shall bear the burden of demonstrating the presence and degree of any mitigating factors to be considered in determining the amount of a fine. However, mitigating factors shall not be considered unless it is determined that the violator has made all good faith efforts to correct and terminate all violations.
- (4) The following persons are designated as the authorized local officials to issue municipal civil infraction citations and/or notices for violations of this article (in addition to any other persons so designated by the authorized enforcement officer): the city manager; the director of public works; and any police officer.
- (5) Except as otherwise provided by this section, the requirements and procedures for commencing municipal civil infraction actions; issuance and service of municipal civil infraction citations; determination and collection of court-ordered fines, costs and expenses; appearances and payment of fines and costs; failure to answer, appear or, pay fines; disposition of fines, costs and expenses paid; and other matters regarding municipal civil infractions shall be as provided by state law.
- (6) Any person who (1) at the time of a violation knew or should have known that a pollutant or substance was discharged contrary to any provision of this article, or contrary to any notice, order, permit, decision or determination promulgated, issued or made by the authorized enforcement officer under this article; or (2) intentionally makes a false statement, representation, or certification in an application for, or form pertaining to a permit, or in a notice, report, or record required by this article, or in any other correspondence or communication, written or oral, with the authorized enforcement officer regarding matters regulated by this article; or (3) intentionally falsifies, tampers with, or renders inaccurate any sampling or monitoring device or record required to be maintained by this article; or (4) commits any other act that is punishable under state law by imprisonment for more than ninety (90) days; shall, upon conviction, be guilty of a misdemeanor punishable by a fine of five hundred dollars (\$500.00) per violation, per day, or imprisonment for up to ninety (90) days, or both in the discretion of the court.
- (7) Any person who aids or abets another person in a violation of this article shall be subject to the fines and other penalties provided in this section.
- (8) Each day that a violation occurs and each provision that a given act or failure to act violates shall be a separate offense.
- (9) In addition to other remedies specified in this section, the court may order compliance with this article and order other such relief as is appropriate to assure compliance with this article. In addition, the city may, as provided in section 37-169 below seek injunctive or other relief to abate the public nuisance that occurs with a violation of this article and take such other actions as are provided in this article or in other applicable laws, rules and regulations. As provide in section 37-170 below, the election of one remedy shall not prevent the simultaneous or subsequent pursuit of other remedies all of which are cumulative.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-163. - Failure to comply; completion.

The city is authorized, after giving reasonable notice and opportunity for compliance, to correct any violation of this article or damage or impairment to the stormwater drainage system caused by a discharge and to bill the person causing the violation or discharge for the costs of the work to be reimbursed. The costs reimbursable under this section shall be in addition to fees, amounts or other costs and expenses required to be paid to the city under other sections of this article.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-164. - Emergency measures.

If emergency measures are necessary to respond to any violation, imminent violation, reasonably likely violation, or threatened violation; to protect public safety, health, and welfare; and/or to prevent loss of life, injury, or damage to property or the environment, the authorized enforcement officer is authorized to carry out or arrange for all such emergency measures. Property owners and dischargers shall be jointly and severally responsible for the cost of such measures and shall promptly reimburse the city for all of such costs.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-165. - Cost recovery for damage to stormwater drainage system.

Any person who discharges to a stormwater drainage system or a water body, including, but not limited to, any person who causes or creates a discharge that violates any provision of this article, produces a deposit or obstruction or otherwise damages or impairs a stormwater drainage system, or causes or contributes to a violation of any federal, state, or local law governing the city, shall be liable to and shall fully reimburse the city for all expenses, costs, losses or damages (direct or indirect) payable or reasonably incurred by the city as a result of any such discharge, deposit, obstruction, damage, impairment, violation, exceedence or noncompliance. The costs that must be reimbursed to the city shall include, but shall not be limited to, all of the following:

- (1) All costs incurred by the city in responding to the violation or discharge, including, expenses for any cleaning, repair or replacement work, and the costs of sampling, monitoring, and treatment, as a result of the discharge, violation, exceedence or noncompliance.
- (2) All costs to the city of monitoring, surveillance, and enforcement in connection with investigating, verifying, and prosecuting any discharge, violation, exceedence, or noncompliance.
- (3) The full amount of any fines, assessments, penalties, and claims, including natural resource damages, levied against the city, or any city representative, by any governmental agency or third party as a result of a violation of applicable laws or regulations that is caused by or contributed to by any discharge, violation, exceedence, or noncompliance.
- (4) The full value of any city staff time (including any required overtime), consultant and engineering fees, and actual attorney fees and defense costs (including the city's legal counsel and any special legal counsel), associated with responding to, investigating, verifying, and prosecuting any discharge, violation, exceedence or noncompliance, or otherwise enforcing the requirements of this article.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-166. - Collection of costs; lien.

- (1) Any amounts to be paid to the city under this article shall be a lien against the premises served or from which the discharges originated. Any such charges that are delinquent for six (6) months or more may be certified annually to the city treasurer, who shall enter the lien on the next tax roll against the premises, the costs shall be collected, and the lien shall be enforced in the same manner as provided for in the collection of taxes assessed upon the roll and the enforcement of a lien for taxes. In addition to any other lawful enforcement methods, the city shall have all remedies authorized by any applicable laws, rules, regulations or court orders.
- (2) The failure of any person to pay any amounts required to be paid to the city under this article shall constitute an additional violation of this article.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-167. - Suspension of access to the stormwater drainage system.

- (1) The authorized enforcement officer may, without prior notice, suspend access to the stormwater drainage system to any person or premises when such suspension is necessary to stop an actual, imminent, reasonably foreseeable, or threatened discharge that presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the stormwater drainage system or a water body. If the person fails to comply with a suspension order issued in an emergency, the authorized enforcement officer may take such steps as deemed necessary to prevent or minimize damage to the stormwater drainage system or the environment, or to minimize danger to persons, and bill the person for the costs incurred by the city in taking such steps.
- (2) Any person discharging to the stormwater drainage system in violation of this article may have his/her/its access to the system terminated, if the authorized enforcement officer determines that such termination would abate or reduce an illicit discharge. The authorized enforcement officer will notify a violator of the proposed termination of its access. It shall be unlawful for any person to reinstate access of the stormwater drainage system to a premises terminated pursuant to this section without the prior written approval of the authorized enforcement officer.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-168. - Appeals.

Any person to whom any provision of this article has been applied may appeal in writing to the city, not later than thirty (30) days after the action or decision being appealed. Such appeal shall identify the matter being appealed, and the basis for the appeal. The city's construction board of appeals shall consider the appeal and make a decision whereby it affirms, rejects, or modifies the action being appealed. In considering any such appeal, the construction board of appeals may consider the recommendations of the authorized enforcement officer and the comments of other persons having knowledge or expertise regarding the matter. In considering any such appeal, construction board of appeals may grant a variance or other relief from the terms of this article, but only upon finding that the following requirements are satisfied:

- (1) Exceptional or extraordinary circumstances or conditions apply to the property in question that do not apply generally to other properties in the city. Such circumstances create a practical difficulty by rendering full compliance with this article impossible, or by increasing costs to the point where the expense of full compliance would far outweigh the benefit to the community.
- (2) The requested relief shall not cause a substantial adverse effect upon properties in the immediate vicinity.
- (3) The exceptional or extraordinary circumstances applying to the property in question are not self-created.
- (4) The requested relief is the minimum relief that will enable reasonable use or development of the property.
- (5) The requested relief will not substantially impair the intent or purpose of this article.

(Ord. No. 07-01, § 1, 2-5-07; Ord. No. 14-03, § 3, 6-2-14)

Sec. 37-169. - Judicial relief.

The authorized enforcement officer may institute legal proceedings in a court of competent jurisdiction to seek all appropriate relief for violations of this article or of any permit, order, notice or agreement issued or entered into under this article. The action may seek temporary or permanent injunctive relief, damages, penalties, costs, and any other relief, at law or equity, that a court may order. The authorized enforcement officer may also seek collection of any unpaid fines, penalties and any other amounts due to the city under this article.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-170. - Cumulative remedies.

The imposition of a single penalty, fine, order, damage, or surcharge upon any person for a violation of this article, or of any permit, order, notice or agreement issued, or entered into under this article, shall not preclude the imposition by the city, the authorized enforcement officer, or a court of competent jurisdiction of a combination of any or all of those sanctions and remedies or additional sanctions and remedies with respect to the same violation, consistent with applicable limitations on penalty amounts under state or federal laws or regulations. A criminal citation and prosecution of a criminal action against a person shall not be dependent upon and need not be held in abeyance during any civil, judicial, or administrative proceeding, conference, or hearing regarding the person.

(Ord. No. 07-01, § 1, 2-5-07)

Sec. 37-171. - Responsibility to implement BMPs.

The owner or operator of a premises used for commercial or industrial purposes shall provide, at the owner or operator's own expense, reasonable protection from an accidental discharge of prohibited materials or other wastes into the stormwater drainage system or water body through the use of structural and nonstructural BMPs. Further, any person responsible for a premises that is, or may be, the source of an illicit discharge may be required to implement, at the person's expense, additional structural and nonstructural BMPs to prevent the further discharge of pollutants to the stormwater drainage system or water body. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

(Ord. No. 07-01, § 1, 2-5-07)

DIVISION 3. - STANDARDS FOR NEWLY DEVELOPED AND REDEVELOPED PROPERTIES

FOOTNOTE(S):

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Editor's note— Appendix A is incorporated herein by reference as if fully set out at length, and a copy is on file and available for inspection at the city clerk's office.

Sec. 37-172. - Applicability, exemptions and general provisions.

- (a) This division shall apply to all development projects in the city commenced after its effective date that modify the exposed surface of at least one acre of land within a contiguous area owned by a single developer, or within a contiguous area that is part of a single plat, subdivision, or site condominium plan. The modification of exposed surfaces may result from construction or demolition activity, landscaping, or earth changes of any type affecting a property. This division shall not apply to:
- (1) The installation or removal of individual mobile homes within a mobile home park. However, this exemption shall not be construed to apply to the construction, expansion, or modification of a mobile home park.
 - (2) Ordinary farming operations such as the planting and harvesting of crops. This exemption shall not [be] construed to apply to paving or construction activity located on farm property, such as the construction of greenhouses, stables, silos, or other structures.
 - (3) Plats with preliminary plat approval and other developments with final land use approval prior to the effective date of this article, wherein such approvals remain in effect.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-173. - Permit required.

- (a) No person shall engage in any development activity without first receiving a stormwater permit from the city pursuant to section 37-174
- (b) The granting of a stormwater permit only authorizes the discharge of stormwater from the development for which the permit is required, subject to the terms of the permit. It shall not be deemed to approve other development, other land use activities, or replace other required permits.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-174. - Stormwater permit review procedures.

- (a) The city shall grant a stormwater permit, which may impose terms and conditions in accordance with subsection (b), only upon compliance with each of the following requirements:
 - (1) The developer has submitted a drainage plan complying with section 37-175
 - (2) The developer has paid or deposited the stormwater permit review fee pursuant to subsection (d).
 - (3) The developer has paid or posted the applicable financial guarantee pursuant to section 37-177
 - (4) The developer agrees to provide all easements necessary to implement the approved drainage plan and to otherwise comply with this article including, but not limited to, section 37-183. All easements shall be acceptable to the city in form and substance and shall be recorded with the county register of deeds. At the discretion of the local government, the final easement may be required prior to permit issuance.
 - (5) The developer provides the required maintenance agreement for routine, emergency, and long-term maintenance of all stormwater management facilities and in compliance with the approved drainage plan and this article including, but not limited to, section 37-184 (maintenance agreement). The maintenance agreement shall be acceptable to the city in form and substance, shall be binding on all future property owners, and shall be recorded with the county register of deeds.
- (b) In granting a stormwater permit, the city may impose such terms and conditions as are reasonably necessary to effectuate the purposes of this article. A developer shall comply with such terms and conditions.
- (c) All expenses and costs incurred by the city directly associated with processing, reviewing and approving or denying a stormwater permit application shall be paid (or reimbursed) to the city from the funds in a separate escrow account established by the developer, as provided in subsection (d). The city may draw funds from a developer's escrow account to reimburse the city for out-of-pocket expenses incurred by the city relating to the application. Such reimbursable expenses include, but are not limited to, expenses related to the following:
 - (1) Services of the city attorney directly related to the application.
 - (2) Services of the city engineer directly related to the application.
 - (3) Services of other independent contractors working for the city which are directly related to the application.
 - (4) Any additional public hearings, required mailings and legal notice requirements necessitated by the application.
- (d) At the time a developer applies for a stormwater permit, the developer shall deposit with the city clerk, as an escrow deposit, an initial amount as determined by resolution of the city council for such matters, and shall provide additional amounts as requested by the city in such increments as are specified in said resolution. Any excess funds remaining in the escrow account after the application has been fully processed, reviewed, and the final city approval and acceptance of the development has occurred, will be refunded to the developer with no interest to be paid on those funds. At no time prior to the city's final decision on an application shall the balance in the escrow account fall below the required initial amount. If the funds in the account are reduced to less than the required initial

amount, the developer shall deposit into the account an additional amount as determined by city council resolution, before the application review process will be continued. Additional amounts may be required to be placed in the escrow account by the developer at the discretion of the city.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-175. - Drainage plan.

The developer shall provide adequate stormwater management facilities for the development site. Adequate facilities reduce the exposure of people to drainage-related inconvenience and to health and safety hazards. They reduce the exposure of real and personal property to damage by stormwater inundation. Stormwater transport facilities (storm sewers) shall be designed to handle a ten-year storm without surcharge. Emergency overland flow-ways shall be provided to handle a one-hundred-year storm to protect structures from flooding. The stormwater management facilities shall provide adequate capacity for managing any stormwater entering the site from adjacent properties.

The developer shall provide a drainage plan to the city for review and approval by the city. The drainage plan shall identify and contain all of the following:

- (1) The location of the development site and water bodies that will receive stormwater runoff.
- (2) The existing and proposed topography of the development site, including the alignment and boundary of the natural drainage courses, with contours having a maximum interval of two (2) feet (using USGS datum). The development site shall be shown on the pertinent county soil map.
- (3) A drawing of the development site indicating state-regulated floodplain areas, local floodplain areas, and areas subject to periodic stormwater inundation.
- (4) The development tributary area to each point of discharge from the development.
- (5) Calculations of stormwater rates and volumes for each point of discharge as follows:
 - a. Pre-development peak discharge rate for the two-year, twenty-four-hour storm (2.37 inches of rain);
 - b. Post-development peak discharge rate for the two-year, twenty-four-hour storm;
 - c. Pre-development stormwater discharge volume for the two-year, twenty-four-hour storm;
 - d. Post-development stormwater discharge volume for the two-year, twenty-four-hour storm;
 - e. Post-development stormwater discharge rate for the ninety-percent annual non-exceedance storm (1.0 inch of rain);
 - f. Post-development stormwater discharge volume for the ninety-percent annual non-exceedance storm;
 - g. Pre-development peak discharge rate for the twenty-five-year storm event;
 - h. Post-development peak discharge rate for the twenty-five-year storm event; and
 - i. Post-development peak discharge rate for the one-hundred-year storm event.
- (6) Design calculations for all stormwater management, transport, control, and treatment facilities.
- (7) The sizes and locations of upstream and downstream culverts serving the major drainage routes flowing into and out of the development site. Any significant off-site and on-site drainage outlet restrictions other than culverts should be noted in the drainage plan.
- (8) An implementation plan for construction and inspection of all stormwater management facilities necessary to the overall drainage plan, including a schedule of the estimated dates of completing construction of the stormwater management facilities shown on the plan and an identification of the proposed inspection procedures to ensure that the stormwater management facilities are constructed in accordance with the approved drainage plan.

- (9) A plan to ensure the effective control of construction site stormwater runoff and sediment track-out onto roadways consistent with section 37-176 (construction site runoff controls).
- (10) The drainage plan contains a description of an adequate, temporary stormwater retention system to prevent construction site stormwater runoff, satisfying the requirements of section 37-176, and the developer has obtained a soil erosion permit, if necessary.
- (11) Drawings, profiles, and specifications for the construction of the stormwater management facilities proposed by the developer to ensure that stormwater runoff will be drained, stored, or otherwise controlled in accordance with this article, and in particular article VIII, as required by the city.
- (12) The name of the engineering firm and the registered professional engineer that designed the drainage plan and that will inspect final construction of the stormwater management facilities.
- (13) All design information must also be submitted in an electronic format as specified by the city.
- (14) Any other information necessary for the city to verify that the drainage plan complies with the city's design and performance standards for drains and stormwater management systems.
- (15) Documentation to ensure that construction site activity does not interfere with the long-term functionality of the post-construction stormwater management facilities, especially infiltration practices.
- (16) Identification of emergency overland flow-ways adequate to protect structures from damage resulting from storms greater than the one-hundred-year storm.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-176. - Construction site runoff controls.

Prior to making any earth change on a development site regulated by this article, the developer shall first obtain a soil erosion permit issued in accordance with Part 91 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, if one is required. The developer shall install stormwater management facilities and shall phase the development activities so as to prevent construction site stormwater runoff and off-site sedimentation. During all construction activities on the development site, the city may inspect the development site to ensure compliance with the approved construction site runoff controls.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-177. - Financial guarantee.

- (a) The city shall not approve a stormwater permit until the developer submits to the city, in a form and amount satisfactory to the city, a letter of credit or other financial guarantee for the timely and satisfactory construction of all stormwater management facilities and site grading in accordance with the approved drainage plan. Upon: 1) certification by a registered professional engineer that the stormwater management facilities have been completed in accordance with the approved drainage plan including, but not limited to, the provisions contained in subsection 37-175(8); and: 2) receipt of construction record drawings meeting the minimum requirements of the city or the OCDC, the city may release the letter of credit, or other financial guarantee subject to final city acceptance and approval.
- (b) Except as provided in subsection (c), the amount of the financial guarantee shall be ten thousand dollars (\$10,000.00), unless the city determines that a greater amount is appropriate, in which case the basis for such determination shall be provided to the developer in writing. In determining whether an amount greater than ten thousand dollars (\$10,000.00) is appropriate, the city shall consider the size and type of the development, the size and type of the on-site stormwater system, and the nature of the off-site stormwater management facilities the development will utilize.

- (c) The city's director of public works may reduce or waive the amount of the financial guarantee for a development that will not increase the percentage of impervious surface of the development site by more than ten (10) percent.
- (d) This article shall not be construed or interpreted as relieving a developer of its obligation to pay all costs associated with on-site private stormwater management facilities as well as those costs arising from the need to make other drainage improvements in order to reduce a development's impact on a drain consistent with adopted design standards.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-178. - Certificate of occupancy.

No certificate of occupancy shall be issued until stormwater management facilities have been completed in accordance with the approved drainage plan. However, the city may issue a certificate of occupancy if an acceptable letter of credit or other financial guarantee has been submitted to the city for the timely and satisfactory construction of all stormwater management facilities and site grading in accordance with the approved drainage plan.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-179. - Management of, and responsibility for, stormwater system.

- (a) The city is not responsible for providing drainage facilities on private property for the management of stormwater on said property. It shall be the responsibility of the property owner to provide for, and maintain, private stormwater management facilities serving the property, and to prevent or correct the accumulation of debris that interferes with the drainage function of a water body. The city shall not be liable for any disruption, failure or deficiency in the storm sewer system.
- (b) All stormwater management facilities shall be constructed and maintained in accordance with all applicable federal, state and local ordinances, and rules and regulations.
- (c) Stormwater management facilities, after construction and approval, shall be maintained in good condition in accordance with the approved drainage plan, and shall not be subsequently altered, revised, or replaced except in accordance with the approved drainage plan or in accordance with approved amendments or revisions in the plan.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-180. - Floodplain standards.

- (a) All new buildings and substantial improvements to existing buildings shall be protected from flood damage up to the flood protection elevation (FPE) and shall be in accordance with all applicable federal, state and local ordinances, rules and regulations. Floodway alteration in a local floodplain shall be permitted only upon review and approval by the city, in accordance with an approved drainage plan. Any construction, fill or alteration of a floodplain of a river, stream, or drain which has a drainage area greater than or equal to two (2) square miles, also requires a state floodplain permit.
- (b) A drainage plan providing for the filling or alteration of a floodway within a local floodplain shall include provisions for maintaining stability of the banks of streams or other water bodies. Establishing buffer zones is one means of providing protection of the slopes and banks of water bodies.
- (c) Within any required buffer zone, no earth change shall take place except in accordance with the approved drainage plan. Such a plan may also include provisions for the replacement of local flood plain storage volume, where such storage volume is lost or diminished as a result of approved development.
- (d) Any earth change within a state-regulated floodplain shall only be undertaken in accordance with any required state or federal permit.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-181. - Soil erosion and sedimentation control.

- (a) All persons who cause, in whole or in part, any earth change to occur shall provide soil erosion and sedimentation control so as to adequately prevent soils from being eroded and discharged or deposited onto adjacent properties or into a stormwater drainage system, a public street or right-of-way, wetland, creek, stream, water body or floodplain. All development shall be in accordance with all applicable federal, state and local ordinances, rules and regulations.
- (b) During any earth change which exposes soil to an increased risk of erosion or sediment track-out, the property owner and other persons causing or participating in the earth change shall do the following:
 - (1) Comply with the stormwater management standards of this article.
 - (2) Obtain and comply with the terms of a soil erosion and sedimentation control permit if required by law.
 - (3) Prevent damage to any public utilities or services within the limits of grading and within any routes of travel or areas of work of construction equipment.
 - (4) Prevent damage to, or impairment of, any water body on or near the location of the earth change or affected area thereby.
 - (5) Prevent damage to adjacent or nearby land.
 - (6) Apply for all required approvals or permits prior to the commencement of work.
 - (7) Proceed with the proposed work only in accordance with the approved plans and in compliance with this article.
 - (8) Maintain all required soil erosion and sedimentation control measures including, but not limited to, measures required for compliance with the terms of this article.
 - (9) Promptly remove all soil, sediment, debris, or other materials applied, dumped, tracked, or otherwise deposited on any lands, public streets, sidewalks, or other public ways or facilities, including catch basins, storm sewers, ditches, drainage swales, or water bodies. Removal of all such soil, sediment, debris or other materials within twenty-four (24) hours shall be considered prima facie compliance with this requirement, unless such materials present an immediate hazard to public health and safety.
 - (10) Refrain from grading lands at locations near or adjoining lands, public streets, sidewalks, alleys, or other public or private property without providing adequate support or other measures so as to protect such other lands, streets, sidewalks or other property from settling, cracking or sustaining other damage.
 - (11) Request and obtain inspection of soil erosion and sedimentation control facilities, by the city at such frequency as required by the city.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-182. - Building openings.

- (a) No building opening or lowest floor shall be constructed below the following elevations:
 - (1) One foot above the base flood elevation.
 - (2) The building opening established at the time of plat or development approval and on file with the city.
 - (3) Three (3) feet above the top of any downstream culvert.
 - (4) Four (4) feet above the bottom of any downstream drain.

- (b) A waiver from elevations stated in subsection (a) may be granted by the city following receipt of a certification from a registered professional engineer demonstrating that the proposed elevation does not pose a risk of flooding.
- (c) Upon completion of construction of the structure's foundation and or slab on grade, a registered land surveyor shall certify any minimum building opening or lowest floor elevation specified by this article. This certificate shall attest that the building opening or lowest floor elevation complies with the standards of this article. The permittee for the building permit shall submit the certificate to the city's building inspections official prior to the commencement of framing and/or structural steel placement. If the surveyor should find that the minimum building opening or lowest floor elevation is below the elevation specified in subsection (a), that opening must be raised using a method that meets with the approval of the city. After reconstruction, a registered land surveyor or engineer shall re-certify that the minimum building opening or lowest floor elevation complies with the standards of this article prior to the commencement of framing and or structural steel placement.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-183. - Stormwater management easements.

The developer shall provide all stormwater management easements necessary to implement the approved drainage plan and to otherwise comply with this article in form and substance required by the city and shall record such easements as directed by the city. The easements shall assure access for proper inspection and maintenance of stormwater management facilities and shall provide adequate emergency overland flow-ways.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-184. - Maintenance agreements.

- (a) *Maintenance agreement required.* The developer shall provide all stormwater maintenance agreements necessary to implement the approved drainage plan and to otherwise comply with this article in form and substance as required by the city, and shall record such agreements as directed by the city. The maintenance agreements shall, among other matters, assure access for proper inspection and maintenance of stormwater management facilities and adequate emergency overland flow-ways. A formal maintenance plan shall be included in the maintenance agreement.
- (b) *Maintenance agreement provisions.*
 - (1) The maintenance agreement shall include a plan for routine, emergency and long-term maintenance of all stormwater BMPs, with a detailed annual estimated budget for the initial three (3) years, and a clear statement that only future maintenance activities in accordance with the maintenance agreement plan shall be permitted without the necessity of securing new permits.
 - (2) Written notice and submittal of maintenance documentation shall be provided to the local government by the property owner at the interval set forth in the maintenance agreement.
 - (3) If it has been found by the city, following notice and an opportunity to be heard by the property owner, that there has been a material failure or refusal to undertake maintenance as required under this article and/or as required in the approved maintenance agreement as required hereunder, the city shall then be authorized, but not required, to hire an entity with qualifications and experience in the subject matter to undertake the monitoring and maintenance as so required, in which event the property owner shall be obligated to advance or reimburse payment for all costs and expenses associated with such monitoring and maintenance, together with a reasonable administrative fee. The maintenance agreement required under this article shall contain a provision spelling out the requirements and, if the applicant objects in any respect to such provision or the underlying rights and obligations, such objection shall be resolved prior to the commencement of construction of the proposed development on the property.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-185. - Establishment of county drains.

Prior to final approval, all stormwater management facilities for platted subdivisions shall be established as county drains as authorized in Section 433, Chapter 18 of the Michigan Drain Code (P.A. 40 of 1956, as amended) for long-term maintenance.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-186. - Stormwater management zones.

- (a) In order to achieve the goals and purposes of this article, the following three (3) stormwater management zones (zones A, B and C) are hereby established. The zones are shown on the map attached as appendix A [\[1\]](#) and made a part of this article, and any modifications to the zones shall be made by ordinance only.
 - (1) Zone A requires the greatest water resource protection. Zone A may include urbanizing rural areas or redeveloping older neighborhoods that discharge to a headwater stream, wetland, pond, ravine, or depression where increases in stormwater runoff rate and volume may negatively affect stream stability, wetland hydrology, and floodplains. Channel protection, flood control, and water quality are all required in zone A. All areas that are not designated as zones B or C will be designated as zone A.
 - (2) Zone B, if delineated in a stormwater master plan, includes areas that discharge to rivers and larger streams where full channel protection is still required, but where peak rate reduction for flood control to the standard specified for zone A is not required. Zone B includes areas along existing floodprone watercourses where floodplain expansion may be required in lieu of onsite stormwater detention.
 - (3) Zone C requires a lesser amount of stormwater runoff control. Zone C is comprised of lands that discharge to a river, lake, or municipal regional stormwater facility where peak rate control to the standard specified for zone A is not required. Volume control (onsite retention) is encouraged in zone C to the extent it is practical. Peak rate reduction for flood control is required only to the extent determined necessary to prevent flooding of the local infrastructure between the proposed development and the zone C water body. Water quality is required to be met. Zone C water bodies generally include: the Great Lakes, inland lakes and large rivers. They may be more specifically defined in a stormwater master plan.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-187. - Performance and design standards.

- (a) Protection of the public health, safety and welfare shall be a primary consideration in the performance and design of all stormwater management facilities.
- (b) The city requires that developers use the most current Michigan LID Manual or comparable standard for design and performance standards for stormwater management facilities, consistent with the terms of this article, and in order to further implement its goals and purposes.
- (c) Stormwater management facilities shall be designed to manage stormwater flow within the available capacity of the downstream conveyance system as determined by the city.
- (d) In addition, stormwater management facilities shall be designed to meet the following water quality, channel protection, and flood control requirements for the zone into which site stormwater discharges.
- (e) The design standards for zones A, B and C, as described in section 37-186, are the following:

Criteria	Zone A	Zone B	Zone C

Zone Description	Site discharges to a headwater stream, ravine, wetland, pond or depression.	Site discharges to a stream needing channel protection but where zone A flood control criteria have been determined to be not necessary.	Site discharges to a river, lake, depression or regional stormwater facility where zone A and B channel protection and flood control criteria have been determined to be not necessary.
Channel Protection <i>(volume and peak rate control)</i>	Onsite retention: No net increase in the pre-development runoff volume and rate from the disturbed portion of the site for the 2-year, 24-hour rainfall event.	Onsite retention: No net increase in the pre-development runoff volume and rate from the disturbed portion of the site for the 2-year, 24-hour rainfall event.	Incorporate onsite retention to the extent it is practical.
Flood Control <i>(peak rate control)</i>	Provide detention of the 25-year rainfall event with a maximum release rate of 0.13 cfs/acre.	None, unless required due to limited conveyance system (storm sewer or ditch) capacity between development and zone B water body.	None, unless required due to limited conveyance system (storm sewer or ditch) capacity between development and zone C water body.
Water Quality <i>(treat by infiltration, filtration, extended detention, or permanent pool)</i>	Provide stormwater treatment for runoff produced by the 90% annual non-exceedance storm from the directly connected impervious area and disturbed pervious area designed to reduce total suspended solids to less than 80 mg/L. (Water quality control will likely be met through channel protection criteria.)	Provide stormwater treatment for runoff produced by the 90% annual non-exceedance storm from the directly connected impervious area and disturbed pervious area designed to reduce total suspended solids to less than 80 mg/L. (Water quality control will likely be met through channel protection criteria.)	Provide stormwater treatment for runoff produced by the 90% annual non-exceedance storm from the directly connected impervious area and disturbed pervious area designed to reduce total suspended solids to less than 80 mg/L.

Sec. 37-188. - Waivers.

- (a) *Regional facilities.* Where stormwater management facilities are provided on a regional basis, city may waive all or a portion of the channel protection, flood control, and water quality requirements of section 37-187 to the extent the objectives are met by the regional facilities.
- (b) *Substitution of extended detention criteria for channel protection.* The city may waive all or a portion of the on-site retention criteria for channel protection in section 37-187 if the developer demonstrates that site constraints preclude sufficient retention onsite.
- (c) *Site retention.* Infiltration shall be used as the primary means of retention. It is not, however, the sole means of providing onsite retention, and the developer must include consideration of stormwater reuse, interception, evaporation, and transpiration. Site constraints that may limit the use of infiltration include:
 - (1) Poorly draining soils;
 - (2) Bedrock;
 - (3) High groundwater or the potential of mounded groundwater to impair other uses;
 - (4) Well-head protection areas;
 - (5) Brownfield sites and areas or soil or groundwater contamination.
- (d) *Approvable demonstration.* An approvable demonstration must show the technical basis for concluding the section 37-187 criteria make development of the site infeasible due to site constraints. A demonstration that only considers financial aspects shall not be approved.

(Ord. No. 14-03, § 4, 6-2-14)

Sec. 37-189. - Reserved.