

Please Substitute for Ordinance No. 80-07
(Placed on 1st Reading and referred to the

PUBLIC WORKS COMMITTEE 9/4/07, PLACED ON
2ND READING & REFERRED TO THE COMMITTEE OF THE
WHOLE 9/17/07.

ORDINANCE NO. 80-07

BY:

Antonio, Bullock, Butler, Dever,
Madigan, Powers, Summers.

AN ORDINANCE to take effect immediately provided it receives the affirmative vote of at least five (5) members elected to Council, or otherwise to take effect and be in force after the earliest period allowed by law, to create new a Chapter 1339, titled Storm Water Management within Part 13, Building Code of the Codified Ordinances of the City of Lakewood to regulate construction and post-construction water runoff for the protection of our local fresh water resources and the City's storm sewer.

WHEREAS, flooding and erosion in the City of Lakewood are significant threats to public health and safety and public and private property, and storm water quantity control slows runoff and reduces its potential for flood damage; and,

WHEREAS, insufficient control of storm water quantity can result in significant damage to receiving water resources, impairing the capacity of these resources to sustain aquatic systems and their associated aquatic life use designations; and,

WHEREAS, soil is most vulnerable to erosion by wind and water during soil disturbing activities and this eroded soil necessitates repair of sewers and ditches and dredging of rivers, harbors, and lakes; accelerates downstream bank erosion and damage to public and private property; endangers water resources by reducing water quality; and causes the siltation of aquatic habitat; and,

WHEREAS, there is a regional effort to reduce the flooding, erosion and sedimentation within various watersheds and the City of Lakewood and to protect and enhance the water resources of the City of Lakewood, and the City of Lakewood recognizes its obligation as a part of a watershed and the region to reduce flooding and erosion and to protect water quality by controlling runoff within its borders; and,

WHEREAS, the City of Lakewood has experienced and continues to experience significant costs associated with inadequate erosion and sediment control including legal fees, engineering services, and increased state and federal regulation; and,

WHEREAS, to promote public health and safety and sound economic development in the City of Lakewood, it is important to provide homebuilders, developers, and landowners with consistent, technically feasible, and operationally

practical standards for storm water management and soil erosion and sediment control;
and,

WHEREAS, Title 40 Code of Federal Regulations (C.F.R.) Parts 9, 122, 123, and 124, referred to as NPDES Storm Water Phase II, require designated communities, including the City of Lakewood, to develop a Storm Water Management Program to address among other components, erosion, sedimentation, and the quality of storm water runoff during and after soil disturbing activities; and,

WHEREAS, Article XVIII, Section 3 of the Ohio Constitution and Chapter 1511 of the Ohio Revised Code grants municipalities the legal authority to adopt rules to abate soil erosion and water pollution by soil sediments; and,

WHEREAS, this Council by a vote of at least five (5) members elected thereto determines that this ordinance is an emergency measure, and that this ordinance shall take effect at the earliest date possible as set forth in ARTICLE III, SECTIONS 10 and 13 of the SECOND AMENDED CHARTER OF THE CITY OF LAKEWOOD, and that it is necessary for the immediate preservation of the public property, health and safety in that this legislation must be implemented immediately to protect the quality of storm water in the City of Lakewood. Now, therefore,

BE IT ORDAINED BY THE CITY OF LAKEWOOD, STATE OF OHIO

Section 1. That a new Chapter titled Storm Water Management within Part 13, Building Code of the Codified Ordinances of the City of Lakewood is hereby enacted to read as follows:

CHAPTER 1339
Storm Water Management

1339.01 PURPOSE AND SCOPE.

(a) The intent of this chapter is to establish technically feasible and economically reasonable standards to achieve a level of storm water management, and erosion and sediment control that will minimize damage to public and private property and degradation of water resources, and will promote and maintain the health, safety, and welfare of the residents of the City of Lakewood. The standards, or Best Management Practices (BMP), referred to and required by this chapter shall be in accordance with the current version of the Ohio Rainwater and Land Development Manual promulgated by the Ohio Department of Natural Resources.

(b) This chapter applies to all parcels and projects located within the City of Lakewood that disturb an area greater than 8,000 square feet regardless of public

sewer configuration in the project area, unless specifically exempted in Section 1339.01.

(c) This chapter does not require a Storm Water Management Plan for routine public maintenance projects, such as sewer or watermain replacement or street reconstruction, which does not result in the installation of additional impervious surface and does not disturb more than 5 acres, as determined by the City Engineer.

(d) This chapter requires owners who develop or re-develop their property within the City of Lakewood to:

(1) Control the volume, rate and quality of storm water runoff from their property to minimize the potential for downstream flooding, erosion, and sedimentation;

(2) Reduce damage to receiving water resources and drainage systems that are caused by new development or redevelopment activities;

(3) Preserve to the maximum extent practicable the natural drainage characteristics of the building site and minimize the need to construct, repair, and replace enclosed storm drain systems;

(4) Preserve to the maximum extent practicable natural infiltration and groundwater recharge, and maintain subsurface flow that replenishes water resources, wetlands, and wells;

(5) Assure that storm water controls are incorporated into site planning and design at the earliest possible stage;

(6) Prevent unnecessary stripping of vegetation and loss of soil, especially adjacent to water resources and wetlands;

(7) Reduce the need for costly maintenance and repairs to roads, embankments, sewage systems, ditches, water resources, wetlands, and storm water management practices that are the result of inadequate control of soil erosion, sediment and storm water;

(8) Reduce the long-term expense of remedial projects needed to address problems caused by inadequate control of storm water, erosion and sediment;

(9) Maximize the use of storm water management practices that serve multiple purposes including, but not limited to, flood control, soil erosion

and sediment control, and water quality protection; and encourage such practices that promote recreation and habitat preservation;

(10) Ensure that all storm water management, soil erosion and sediment control practices are properly designed, constructed, and maintained;

(11) Protect and maintain the receiving stream's physical, chemical, biological characteristics and stream functions;

(12) Incorporate water quality protection practices that encourage and promote habitat preservation; and

(13) Provide perpetual management of storm water runoff quality and quantity.

1339.02 DEFINITIONS.

As used in this chapter:

(a) **APPROVING AUTHORITY** means the official responsible for administering the applicable program(s).

(b) **BEST MANAGEMENT PRACTICE (BMP)** means any practice or combination of practices that is determined to be the most effective, practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution generated by nonpoint sources of pollution to a level compatible with water quality goals. BMPs may include structural practices, conservation practices and operation and maintenance procedures.

(c) **CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)** means a person that has met the requirements established by the CPESC Council of Certified Professional In Erosion and Sediment Control, Inc. to be a Certified Professional in Erosion and Sediment Control.

(d) **CHANNEL** means a natural stream that conveys water, or a ditch or channel excavated for the natural flow of water.

(e) **CONCENTRATED STORM WATER RUNOFF** means surface water runoff which converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels or storm sewers, and which exceeds the maximum specified flow rates of filters or perimeter controls intended to control sheet flow.

(f) **CONSERVATION** means the wise use and management of natural resources.

(g) CUT AND FILL SLOPES means a portion of land surface or area from which soil material is excavated and/or filled.

(h) DENUDED AREA means a portion of land surface on which the vegetation or other soil stabilization features have been removed, destroyed or covered, and which may result in or contribute to erosion and sedimentation.

(i) DETENTION BASIN means a storm water management pond that remains dry between storm events. Storm water management ponds include a properly engineered/designed volume which is dedicated to the temporary storage and slow release of runoff waters.

(j) DEVELOPMENT AREA means any tract, lot, or parcel of land, or combination of tracts, lots or parcels of land, which are in one ownership, or are contiguous and in diverse ownership, where earth-disturbing activity is to be performed.

(k) DITCH means an excavation, either dug or natural, for the purpose of drainage or irrigation, and having intermittent flow.

(l) DUMPING means the grading, pushing, piling, throwing, unloading or placing of soil or other material.

(m) EARTH DISTURBING ACTIVITY means any grading, excavating, filling, or other alteration of the earth's surface where natural or man-made ground cover is destroyed.

(n) EARTH MATERIAL means soil, sediment, rock, sand, gravel, and organic material or residue associated with or attached to the soil.

(o) EROSION means the process by which the land surface is worn away by the action of water, wind, ice or gravity.

(p) EROSION AND SEDIMENT CONTROL means a written and/or drawn soil erosion and sediment pollution control plan to minimize erosion and prevent off-site sedimentation throughout all earth disturbing activities on a development area.

(q) EROSION AND SEDIMENT CONTROL PRACTICES means Conservation measures used to control sediment pollution and including structural practices, vegetative practices and management techniques.

(r) EXISTING means in existence at the time of the passage of this chapter.

(s) FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) means the agency

with overall responsibility for administering the National Flood Insurance Program.

(t) FINAL STABILIZATION means established uniform ground cover at a growth density of 80 percent or better.

(u) FREQUENCY STORM means a rainfall event of a magnitude having a specified average recurrence interval and calculated with Natural Resources Conservation Service, USDA Type II twenty-four hour curves or depth-duration frequency curves.

(v) GRADING means earth disturbing activity such as excavation, stripping, cutting, filling, stockpiling, or any combination thereof.

(w) GRUBBING means removing, clearing or scalping material such as roots, stumps or sod.

(x) IMPERVIOUS AREA or IMPERVIOUS COVER means any surface that cannot effectively absorb or infiltrate water. This includes but is not limited to roads, streets, parking lots, rooftops and sidewalks.

(y) INTERMITTENT STREAM means a natural channel that may have some water in pools but where surface flows are non-existent or interstitial (flowing through sand and gravel in stream beds) for periods of one week or more during typical summer months.

(z) LARGER COMMON PLAN OF DEVELOPMENT OR SALE means a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.

(aa) LANDSLIDE means the mass movement of soil and rock material downhill under the influence of gravity in which the movement of the soil mass occurs along an interior surface of sliding.

(bb) LOCAL COUNTY SWCD means the local county Soil and Water Conservation District.

(cc) NATURAL RESOURCES CONSERVATION SERVICE (NRCS) means an agency of the United States Department of Agriculture, formerly known as the Soil Conservation Service (SCS).

(dd) NPDES PERMIT means a National Pollutant Discharge Elimination System Permit issued by Ohio EPA under the authority of the USEPA, and derived from the Federal Clean Water Act.

(ee) OHIO EPA means the Ohio Environmental Protection Agency.

(ff) ORDINARY HIGH WATER MARK means the point of the bank or shore to which the presence and action of surface water is so continuous as to leave a district marked by erosion, destruction or prevention of woody terrestrial vegetation, predominance of aquatic vegetation, or other easily recognized characteristic.

(gg) OUTFALL means an area where water flows from a structure such as a conduit, storm sewer, improved channel or drain, and the area immediately beyond the structure which is impacted by the velocity of flow in the structure.

(hh) PERSON means any individual, corporation, partnership, joint venture, agency, unincorporated association, municipal corporation, township, county, state agency, the federal government, or any combination thereof.

(ii) PROFESSIONAL ENGINEER means a person registered in the State of Ohio as a Professional Engineer.

(jj) REDEVELOPMENT means the demolition or removal of existing structures or land uses and construction of new ones.

(kk) RETENTION BASIN means a storm water management pond that maintains a permanent pool of water. These storm water management ponds include a properly engineered/designed volume dedicated to the temporary storage and slow release of runoff waters.

(ll) RIPARIAN AREA means naturally vegetated land adjacent to watercourses which, if appropriately sized, helps to stabilize stream banks, limit erosion, reduce flood flows, and/or filter and settle out runoff pollutants, or which performs other functions consistent with the purposes of this chapter.

(mm) RIPARIAN SETBACK means those lands within the City of Lakewood which are alongside streams where earth disturbing activities will not take place and natural vegetation will not be removed.

(nn) RUNOFF means surface water runoff which converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels or storm sewers, and which exceeds the maximum specified flow rates of filters or perimeter controls intended to control sheet flow.

(oo) SEDIMENT means solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water, gravity or ice, and has come to rest on the earth's surface either on dry land or in a body of water.

(pp) SEDIMENT SETTLING POND means a temporary Sediment Pond that releases runoff at a controlled rate. It is designed to slowly release runoff, detaining it long enough to allow most of the sediment to settle out of the water. The outlet structure is usually a designed pipe riser and barrel. The entire structure is removed after construction. Permanent storm water detention structures can be modified to function as temporary Sediment Basins.

(qq) SEDIMENT CONTROL means the limiting of sediment being transported by controlling erosion or detaining sediment-laden water and, allowing the sediment to settle out.

(rr) SEDIMENT BARRIER means a sediment control device such as a geotextile Silt Fence or a grass Filter Strip, usually capable of controlling only small flow rates. (Straw bale barriers are not acceptable.)

(ss) SEDIMENT BASIN means a temporary Settling Pond that releases runoff at a controlled rate. It is designed to slowly release runoff, detaining it long enough to allow most of the sediment to settle out of the water. The outlet structure is usually a designed pipe riser and barrel. The entire structure is removed after construction. Permanent storm water detention structures can be modified to function as temporary Sediment Basins.

(tt) SEDIMENT POLLUTION means a failure to use management or conservation practices to control wind or water erosion of the soil and to minimize the degradation of water resources by soil sediment in conjunction with land grading, excavating, filling, or other soil disturbing activities on land used or being developed for commercial, industrial, residential, or other purposes.

(uu) SENSITIVE AREA means an area or water resource that requires special management because of its susceptibility to sediment pollution, or because of its importance to the well-being of the surrounding communities, region, or the state and includes, but is not limited to, the following:

- (1) Ponds, wetlands or small lakes with less than five acres of surface area;
- (2) Small streams with gradients less than ten feet per mile with average annual flows of less than 3.5 feet per second containing sand or gravel bottoms;
- (3) Drainage areas of a locally or Ohio designated Scenic River; or
- (4) Riparian and wetland areas.

(vv) SETTLING POND means a runoff detention structure, such as a Sediment Basin or Sediment Trap, which detains sediment-laden runoff, allowing sediment to settle out.

(ww) SHEET FLOW means water runoff in a thin uniform layer or rills and which is of small enough quantity to be treated by sediment barriers.

(xx) SLIP means a landslide as defined under "Landslides."

(yy) SLOUGHING means a slip or downward movement of an extended layer of soil resulting from the undermining action of water or the earth disturbing activity of man.

(zz) SOIL means erodible earth material consisting of minerals and/or organics.

(aaa) SOIL CONSERVATION SERVICE, USDA means the federal agency now titled the "Natural Resources Conservation Service," which is an agency of the United States Department of Agriculture.

(bbb) SOIL EROSION AND SEDIMENT CONTROL PLAN means a written and/or drawn soil erosion and sediment pollution control plan to minimize erosion and prevent off-site sedimentation throughout all earth disturbing activities on a development area.

(ccc) SOIL EROSION AND SEDIMENT CONTROL PRACTICES means conservation measures used to control sediment pollution and including structural practices, vegetative practices and management techniques.

(ddd) SOIL STABILIZATION means vegetative or structural soil cover that controls erosion, and includes permanent and temporary seeding, mulch, sod, pavement, etc.

(eee) SOIL SURVEY means the official soil survey produced by the Natural Resources Conservation Service, USDA in cooperation with the Division of Soil and Water Conservation, ODNR and the local Board of County Commissioners.

(fff) STORM WATER CONTROL STRUCTURE means a practice used to control storm water runoff from development areas.

(ggg) STORM WATER CONVEYANCE means all storm sewers, channels, streams, ponds, lakes, etc., used for conveying concentrated storm water runoff, or for storing storm water runoff.

(hhh) STORM WATER RUNOFF has the same meaning as the term "Runoff."

(iii) STREAM means a body of water running or flowing on the earth's surface, or a channel with a defined bed and banks in which such flow occurs. Flow may be seasonally intermittent.

(jjj) UNSTABLE SOIL means a portion of land surface or area which is prone to slipping, sloughing or landslides, or is identified by Natural Resources Conservation Service methodology as having a low soil strength.

(kkk) USEPA means the United States Environmental Protection Agency.

(lll) WASTEWATER means any water that is contaminated by any of the following, but not limited to gasoline, fuel oil, hydrocarbon based chemicals, paint, paint washing liquids or other paint wastes, sanitary wastes, or any other Ohio EPA regulated contaminants.

(mmm) WATERCOURSE means any natural, perennial, or intermittent channel with a defined bed and banks, stream, river or brook.

(nnn) WATER QUALITY VOLUME (WQv) means the volume of storm water runoff which must be captured and treated prior to discharge from the developed site after construction is complete.

(ooo) WATER QUALITY BASIN means a detention or retention pond designed and constructed with an appropriate capacity to treat the WQv.

(ppp) WATER RESOURCES means all streams, lakes, ponds, wetlands, water courses, waterways, drainage systems, and all other bodies or accumulations of surface water, either natural or artificial, which are situated wholly or partly within, or border upon this state, or are within its jurisdiction, except those private waters which do not combine or affect a junction with natural surface waters.

(qqq) WETLAND means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas. (40 Code of Federal Regulations (CFR) 232, as amended). Wetlands shall be delineated by a site survey approved by the City of Lakewood using delineation protocols accepted by the U.S. Army Corps of Engineers and the Ohio EPA at the time of application of this regulation. If a conflict exists between the delineation protocols of these two agencies, the delineation protocol that results in the most inclusive area of wetlands shall apply.

(rrr) WETLAND SETBACK means those lands adjacent to wetlands where earth disturbing activities will not take place and natural vegetation will not be removed.

(sss) WINTER means the period of time between October 1 of any given year and April 1 of the following year.

1339.03 DISCLAIMER OF LIABILITY.

Neither submission of a plan under the provisions herein, nor compliance with the provisions of this chapter, shall relieve any person or entity from responsibility for damage to any person or property that is otherwise imposed by law.

1339.04 CONFLICTS, SEVERABILITY, NUISANCES & RESPONSIBILITY.

(a) Where this chapter imposes a greater restriction upon land than is imposed or required by other City of Lakewood provisions of law, ordinance, contract or deed, the provisions of this chapter shall prevail.

(b) If a court of competent jurisdiction declares any clause, section, or provision of this chapter invalid or unconstitutional, the validity of the remainder shall not be affected thereby.

(c) This chapter shall not be construed as authorizing any person to maintain a private or public nuisance on their property. Compliance with the provisions of this chapter shall not be a defense in any action to abate such nuisance.

(d) Failure of the City of Lakewood to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the owner from the responsibility for the condition or damage resulting there from, and shall not result in the City of Lakewood, its officers, employees, or agents being responsible for any condition or damage resulting there from.

1339.05 CONSULTATIONS.

In implementing this chapter the City Engineer or other City of Lakewood officials may consult with the local county SWCD, state and federal agencies and other technical experts as necessary. Any costs associated with such consultations may be assessed to the applicant.

1310.06 ISSUANCE OF BUILDING PERMITS.

(a) No person shall begin soil disturbing activity unless all necessary local, county, state and federal permits have been granted to the owner or operator, including permits for construction that falls within the scope of this chapter.

(b) Two building permits will be issued for all construction that falls within the

scope of this chapter:

- (1) The first building permit will allow the construction of the footers, basement walls or slabs, and utility service laterals. The first building permit will not be issued until the Storm Water Management Plan (SWMP) is approved.
- (2) No additional construction shall be performed and no additional building materials shall be allowed on the site until the City of Lakewood has issued the second building permit. The City Engineer may approve the stockpiling of additional construction materials on the site prior to the issuance of the second permit if a suitable location can be identified. Proper Soil Erosion and Sediment Control must be maintained on the stockpile area prior to, during, and after the area is used for stockpiling.
- (3) The second building permit will allow delivery of the remaining building materials and prosecution of the remaining construction activities. This second building permit will not be issued until the City Engineer certifies that the required BMPs and any other BMPs identified in the Storm Water Management Plan submitted with the Application for the first building permit have been properly installed.

1339.07 APPLICATION PROCEDURES FOR STORM WATER MANAGEMENT PLANS (SWMP).

- (a) Applicants or their consultants may request a pre-application meeting with the City Engineer and Building Department to review all SWMP requirements and fees.
- (b) SWMPs developed by the site owners and approved by the City of Lakewood in accordance with this regulation do not relieve the site owner of responsibility for obtaining and complying with all other necessary permits and/or approvals from federal, state, county, and local agencies and departments. If requirements vary, the most stringent requirement shall be followed. SWMPs submitted to the City Engineer for review and approval shall be accompanied by all other required permits and documentation relevant to the project, including but not limited to the permits required and issued by the US Army Corps Of Engineers, Ohio EPA and ODNR Division of Water.
- (c) The application must include a letter or report from the Cuyahoga Soil and Water Conservation District (CSWCD) that states the SWMP has been reviewed and meets all requirements of the Ohio EPA and this chapter.
- (d) Three (3) sets of the SWMP documents and all items required by this chapter shall be submitted to the City Engineer with text material being submitted on 8.5 by 11 inch paper and drawings on no larger than 24 by 36 inch sized paper with

scaled reductions on 11 by 17 inch paper.

(e) The City Engineer shall review the documents, including the review report from the CSWCD, and shall approve or return these with comments and recommendations for revisions within thirty (30) working days after receipt of the plan as described above. A plan rejected because of deficiencies shall receive a report stating specific problems. At the time of receipt of a revised plan, another thirty (30) day review period shall begin.

(f) Approved SWMPs shall terminate twenty-four months after the effective date of the plan approval if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete, within a reasonable time, a continuing program of installation or modification. The City Engineer may extend these dates of expiration by up to twelve months if the applicant submits, within a reasonable time before the termination date, a written request containing information that, in the judgment of the City Engineer, adequately justifies an extension of time.

(g) The City of Lakewood will perform construction inspections until the site reaches final stabilization as determined by the City Engineer.

(h) The Storm Water Management Plan review, filing and inspection fee is part of the complete application submittal and must be paid in full by the applicant/owner prior to the commencement of any reviews by the City. The City Engineer shall establish a fee schedule based upon the actual estimated cost for providing these services. At such time that the fee reserve balance falls below 35 percent of its original balance the applicant/owner will be required to deposit additional funds to cover the anticipated costs of future fees or return the reserve to the original balance, as determined by the City Engineer. Upon Final Acceptance, all funds remaining will be returned to the applicant/owner. The schedule of fees is available in Chapter 1309.16.

1339.08 STORM WATER MANAGEMENT PLAN.

The Storm Water Management Plan (SWMP), BMPs and specifications used to satisfy the conditions of this chapter shall meet the standards and specifications in the current edition of the Ohio *Rain Water and Land Development* manual. The plans must make use of the practices that preserve the existing natural condition to the Maximum Extent Practicable.

(a) **Development Sites Under One (1) Acre.** Individual development sites that are larger than 8,000 square feet and smaller than one (1) acre (43,560 square feet) in total size of disturbed area, shall submit an Abbreviated SWMP. The

Abbreviated SWMP must include the following items, in addition to any other items from this chapter that are required by the City Engineer:

Abbreviated SWMP items:

(1) **Storm Water Issues.** A statement as to how the storm water runoff that will be caused by the planned development project will be handled. This statement must identify the Best Management Practices (BMPs) the new construction project will include addressing storm water runoff.

(2) **Soil Erosion and Sediment Issues.** A topographic plan of the entire development site must be submitted that identifies the location of:

A. All existing and planned impervious areas, storm water inlets, drainage swales, wetlands, streams, conservation easements and other natural features to be saved and protected on the property.

B. All existing and planned temporary and permanent conservation practices for the site, to include at a minimum the following elements as approved by the City Engineer:

(i) The existing and proposed topography shown in the appropriate contour intervals as approved by the City Engineer (generally one-foot contours are used), and;

(ii) Soil erosion and sediment control BMPs, and;

(iii) Construction Entrance, and;

(iv) Temporary Grass Seeding with proper erosion control measures, and;

(v) Storm Drain Inlet Protection around every storm yard inlet on the site or accepting drainage from the site, and;

(vi) Silt Fence protection for any stream located on or close to the site and lacking an adequate vegetative buffer, and;

(vii) Silt Fence to prevent sediment discharge into street storm sewer inlets where no centralized sediment control exists for the drainage area that includes the lot, and;

(viii) Construction fence to protect any conservation easements, riparian setbacks and wetland setbacks from encroachment by construction activities.

(3) **Temporary Seeding Schedule.** The schedule for the use of Temporary Seeding developed according to the Temporary Seeding Table contained in the Minimum Standards Section of this chapter must be included.

(4) **Material Stockpile Locations.** The location of construction material stockpile areas with a description of the Soil Erosion and Sediment Controls to be maintained on the stockpile area prior to, during, and after the area is used for stockpiling.

(b) **Development Sites One (1) Acre or Larger.** All developments that have a larger common plan of development or sale equal to or larger than one (1) acre in size of disturbed area shall prepare and submit a Comprehensive SWMP. The Comprehensive SWMP must include the following items, in addition to any other items from this chapter that are required by the City Engineer:

Comprehensive SWMP items:

(1) **Site Description.** A statement that includes text describing:

A. Prior land uses of the site;

B. The nature and type of construction activity (e.g., low density residential, shopping mall, highway, etc.);

C. Total area of the site and the area of the site that is expected to be disturbed (i.e., grubbing, clearing, excavating, filling or grading, including off-site borrow, fill or spoil areas and off-site utility installation areas);

D. An estimate of the impervious area and percent imperviousness created by the construction activity;

E. An onsite, detailed Soils Engineering Report identifying the types of soils within, or affected by, the development area; and

F. The name and/or location of the immediate receiving stream or surface water(s) and the first subsequent named receiving water and the major river watersheds in which it is located.

- (2) **Proposed Development Plan.** A drawing showing locations of:
- A. The larger common plan of development or sale;
 - B. The development area; and
 - C. All pertinent surrounding natural features within 200 feet of the development site including, but not limited to:
 - (i) Water resources such as wetlands, springs, lakes, ponds, rivers and streams (including intermittent streams with a defined bed and bank);
 - (ii) Conservation Easements;
 - (iii) Other sensitive natural resources;
 - (iv) The sensitive areas receiving runoff from the development; and
 - (v) All off-site utility installation areas that are related to the planned project.

(3) **Storm Water Pollution Prevention Plan (SWP3).** The permittee must adhere to all requirements of the EPA Construction General Permit "SWP3 Requirements" section. In addition, the following items shall also be shown on the SWP3 drawing:

- A. Drainage patterns during major phases of construction (multiple drawings may be needed);
- B. All off-site borrow or spoil areas; and
- C. The location of each proposed soil erosion and sediment control BMP, including at a minimum:
 - (i) Permanent soil erosion control practices to be left in place after construction operations have been completed (e.g. level spreaders, permanent erosion control matting, gabions, rock lined channels, etc.);
 - (ii) Areas likely to require temporary stabilization during the course of site development;
 - (iii) Designated construction entrances where vehicles will access the construction site;

- (iv) In-stream activities including stream crossings;
- (v) Areas designated for the storage or disposal of solid, sanitary and toxic wastes;
- (vi) Dumpsters;
- (vii) Concrete truck washout;
- (viii) Fuel tanks;
- (ix) BMPs that divert runoff away from disturbed areas and steep slopes where practicable including rock check dams, pipe slope drains, diversions to direct flow away from exposed soils, and protective grading practices; and
- (x) Sediment settling ponds drawn to scale.

D. Existing and proposed locations of buildings, roads, parking facilities and utilities.

E. Boundaries of wetlands and stream channels the owner intends to fill or relocate for which the owner is seeking approval from the US Army Corps of Engineers and/or Ohio EPA.

F. Identification of size, maintenance requirements, design calculations and detail drawings for each BMP.

G. The type and amount of plant seed, live plants, fertilizer, agricultural ground limestone and mulch to be used. Specification of soil testing requirements for fertility and lime requirements will be included. Specification for the use of perennial grass seed will also be included.

H. Scheduling, phasing, and coordination of construction operations and erosion and sediment control BMPs, including vegetative plantings and mulch.

I. All other soil erosion and sediment control related BMPs and items that are required by the City Engineer.

(4) **Post-Construction Storm Water Management Plan.** The permittee must adhere to all requirements of the current EPA Construction General Permit "Post-Construction Storm Water Management" section. Specific items of the Construction General Permit that the permittee should be aware of and adhere to include the water quality volume

calculation, runoff coefficients based on the type of land use, and target drain times for structural post-construction BMPs. In addition, the following items shall be included in the Post-Construction Storm Water Management Plan:

- A. A general description of the strategies proposed to meet this chapter;
- B. An As-Built SWMP drawing showing the location, drawn to scale, of permanent storm water conveyance, detention and retention structures, other storm water control structures and storm water easements;
- C. Design calculations for all permanent BMPs;
- D. Long-term maintenance requirements and inspection schedules for all permanent BMPs;
- E. The landowner, person or entity financially responsible for assuring the performance of long-term maintenance and inspections of permanent BMPs;
- F. The method of funding long-term maintenance and inspection of all storm water management practices;
- G. Features of the design that facilitates maintenance of the practice. Include a written plan for providing an area for dewatering of dredged sediment, or the need to truck sediment from the site;
- H. Any other storm water related items required by the City Engineer;
- I. A prohibition on alteration of any BMPs without prior written approval from the City Engineer; and
- J. An Inspection and Maintenance Agreement, as defined in section 1339.11 of this chapter.

1339.09 CONSTRUCTION MINIMUM STANDARDS.

In order to control sediment pollution of water resources, the owner or person responsible for the development area shall use conservation planning and practices to maintain the level of conservation established in the following standards. The permittee must adhere to all requirements of the EPA Construction General Permit. In addition, the following items are general guidelines and shall not limit the right of the City Engineer to impose at any time additional, more stringent requirements, nor shall the guidelines limit the right of the City Engineer to waive, in writing, individual requirements.

(a) The plan shall include measures that control the flow of runoff from disturbed areas so as to prevent soil erosion from occurring.

(b) Structural Practices shall be used to control erosion and trap sediment from areas remaining disturbed for more than 21 days.

(c) Sediment Barriers: Sheet flow runoff from denuded areas shall be intercepted by Silt Fence or Diversions to protect adjacent properties and water resources from sediment. Where intended to provide sediment control, Silt Fence shall be placed on a level contour. The relationship between the maximum drainage areas to Silt Fence for a particular slope is shown in the table below:

Table 1: Silt Fence Applicability

Maximum drainage area (in acres) to 100 linear feet of Silt Fence	Range of slope for a particular drainage area (in percent)
0.5	< 2%
0.25	≥ 2% but < 20%
0.125	≥ 20% but < 50%

This does not preclude the use of other sediment barriers designed to control sheet flow runoff. The total runoff flow treated by a sediment barrier shall not exceed the design capacity for that sediment barrier. Straw Bale Barriers are not acceptable.

(d) Storm Water Diversion Practices: Storm water diversion practices shall be used to keep runoff away from disturbed areas and steep slopes where practicable. Such practices, which include Swales, Dikes or Berms, Pipe Slope Drains and Diversions, may receive storm water runoff from areas up to ten (10) acres. Storm water diversion practices alone are not considered a sediment control practice unless those are used in conjunction with a sediment settling pond.

(e) All sediment control practices must be capable of ponding runoff in order to be considered functional.

(f) Clearing and Grubbing will be done in two (2) or more phases. The first phase will include only those locations necessary to install the perimeter soil erosion, sediment and storm water control BMPs. After the perimeter controls are in place and functioning, the remaining phase(s) of clearing and grubbing may continue.

(g) Timing of Sediment Trapping Practices: Sediment control practices shall be functional throughout all phases of up slope earth disturbing activity. Settling facilities, perimeter controls and other practices intended to trap sediment shall be implemented prior to grading and within seven (7) days from the start of grubbing. They shall continue to function until the up slope development area is permanently re-stabilized.

As construction progresses and the topography is altered, appropriate controls must be constructed or existing controls altered to address the changing drainage patterns.

(h) Stabilization of Denuded Areas: Disturbed areas must be stabilized as specified in the tables below, or according to the Ohio EPA NPDES Storm Water Permit Rules, whichever is most restrictive:

Table 2: Permanent Stabilization

Area requiring permanent stabilization	Time frame to apply erosion controls
Any areas that will lie dormant for one (1) year or more	Within seven (7) days of the most recent disturbance
Any areas within fifty (50) feet of a stream and at final grade	Within two (2) days of reaching final grade
Any other areas at final grade	Within seven (7) days of reaching final grade within that area

Table 3: Temporary Stabilization

Area requiring permanent stabilization	Time frame to apply erosion controls
Any disturbed areas within fifty (50) feet of a stream and not at final grade	Within two (2) days of the most recent disturbance if the area will remain idle for twenty-one (21) days or more
Disturbed areas that will be dormant for more than 21 days but less than one (1) year and not within fifty (50) feet of a stream	Within seven (7) days of the most recent disturbance within the area.
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques must be employed.

In any case, Temporary or Permanent Stabilization will be properly installed, pursuant to the most recent edition of the Ohio *Rainwater and Land Development* manual, before the second building permit is issued.

(i) Sediment Settling Ponds: Storm water runoff that exceeds the design capacity of sediment barriers and concentrated storm water flows shall pass through a sediment settling facility.

(1) Where storm sewer drainage areas include 10 or more acres disturbed at one time, a temporary (or permanent) sediment settling pond must be provided until final stabilization of the site. In single-family residential construction, final stabilization is after the houses are built and permanent landscaping is done.

A. Alternative equivalent controls may be used if the owner can show, in writing, that the Ohio EPA approved the use of the alternatives in the Storm Water Pollution Prevention Plan (SWP3) for the site, subject to the approval of the City Engineer.

B. It is recommended that for drainage locations of less than 10 acres, smaller sediment settling basins and/or Sediment Traps be used.

(2) Each facility's storage capacity shall be no less than sixty-seven (67) cubic yards per acre of total contributing drainage area. The storage volume will be measured from the bottom of the basin to the top of the primary (principle) spillway.

(3) Permanent storm water management ponds that are designed to trap sediment during construction shall be designed to provide for a slow release of sediment-laden water. The draw down time shall meet the criteria in the Ohio *Rainwater and Land Development* manual.

(4) The design configuration between inlet(s) and the outlet of settling ponds must provide at least two units of length for each one unit of width (> 2:1 length to width ratio).

(5) The depth of the sediment settling pond must be less than or equal to five (5) feet.

(6) Sediment must be removed from the sediment settling ponds when the design capacity has been reduced by 40%.

(7) Public safety, especially as it relates to children, must be considered in the design. Alternative sediment controls must be used where site limitations would preclude a safe design.

(8) Temporary sediment settling ponds will not be constructed in any stream channel.

(j) Storm Sewer Inlet Protection:

(1) All storm sewer inlets that accept water runoff from the development area shall be protected so that sediment-laden water will not enter the storm sewer, unless the storm drain system drains to a Sediment Settling Pond and is exempted in writing by the City Engineer. In areas where construction will be ongoing, such as subdivisions, the storm sewer protection shall be maintained until all up slope areas reach final stabilization, as determined by the City Engineer.

(2) At the end of this period the site owner shall hydraulically clean the storm sewers to the satisfaction of the City Engineer. All sediments shall be removed from the system and shall not be flushed downstream.

(k) Working Near, Or Crossing Streams and Wetlands:

(1) Construction vehicles shall avoid water resources, wetlands, riparian areas, and their setbacks. If construction vehicles must cross these areas during construction, an approved temporary crossing shall be constructed. Streams, including intermittent streams with a defined bed and banks, shall be restabilized immediately after in-channel work is completed, interrupted, or stopped. Erodible materials will not be used in making stream crossings.

(2) No soil, rock, debris, or any other material shall be dumped or placed into a water resource or into such proximity that it may slough, slip, or erode into a water resource unless such dumping or placing is authorized by the approving authority and, when applicable, the US Army Corps Of Engineers and Ohio EPA, for such purposes as, but not limited to, constructing bridges, culverts, and erosion or sediment control structures.

(3) If construction activities disturb areas adjacent to streams, structural practices shall be designed and implemented on site to protect the adjacent streams from the impacts of sediment runoff.

(l) Construction Entrance:

(1) Measures shall be taken to prevent soil transport onto public roads, or surfaces where runoff is not checked by sediment controls.

(2) Stone with geotextile construction entrance(s) shall be implemented as required by the City Engineer and the Ohio EPA. These will be planned and installed according to the requirements in the most recent edition of the Ohio *Rainwater and Land Development* manual.

(3) Where soil is transported onto a public road surface, the roads shall be cleaned thoroughly at the end of each day, or more frequently, in order to ensure public safety. Soil shall be removed from paved surfaces by shoveling or sweeping. Street washing shall be allowed only after shoveling or sweeping has removed most of the sediment and street sewer inlet protection is properly installed unless end of sewer sediment ponds exist and are properly functioning.

(4) Erodible material ramps in streets will not be used to enable equipment to cross curbs. Non-erosive materials (e.g. wood and stone) can be used.

(m) Stabilization of Outfalls and Channels: Outfalls and constructed or modified channels shall be designed and constructed to withstand the expected velocity of flow from the planned post-development frequency storm without eroding. The planned post-construction velocity and flow shall include the entire contributing watershed.

(n) Establishment of Permanent Vegetation: A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until ground cover is achieved which, in the opinion of the City Engineer, has 70% vegetative density over the entire disturbed area and provides adequate cover, and is mature enough to satisfactorily control soil erosion and survive adverse weather conditions.

(o) Disposition of Temporary Practices: All temporary soil erosion and sediment control practices shall be disposed of immediately after final site stabilization is achieved or after the temporary practices are no longer needed, unless otherwise required by the City Engineer. Trapped sediment shall be permanently stabilized to prevent further erosion. The Construction Maintenance Guarantee shall not be released by the City of Lakewood until all temporary soil erosion and sediment control practices that are no longer needed have been removed, properly disposed of and any trapped sediment has been stabilized.

(p) Underground Utility Construction: The construction of underground utility lines, pipes, etc. shall be subject to the following criteria:

(1) Trenches shall remain open for no more than five days, unless approved by the City Engineer.

(2) There shall be no turbid discharges to surface waters resulting from dewatering activities. If trench or ground water contains sediment, it must pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site or to waters of the state.

(3) When discharging clean ground water care must be taken to ensure that it does not become pollutant laden by crossing over disturbed soils or other pollutant sources.

(q) Inspections: In general, inspections will be performed in accordance with the Ohio EPA Construction Site Inspection Checklist.

(1) If inspections or other information indicates a control has been used inappropriately or incorrectly or it has failed, it must be replaced or modified for the site conditions.

(2) The owner of the development area shall have the site inspected for soil erosion, sediment control and other environmental concerns every seven (7) calendar days, and within twenty-four (24) hours of a 0.5 inch or greater rainfall event until the City Engineer certifies the site as being stable. The City Engineer certification does not relieve the permittee from meeting the Ohio EPA NPDES inspection requirements.

(3) The owner, or his designated representative, shall keep a written log of each inspection and any subsequent improvements to the soil erosion, sediment control or other environmental controls. The inspections shall include the date of the inspection, the name of the inspector, weather conditions, and the actions needed to correct the identified problems.

(4) The inspection log will include the date and actions taken to correct problems noted in past inspection logs.

(5) If the construction site is subject to Ohio EPA's National Pollutant Discharge Elimination System (NPDES) permit for construction activity, a copy of all of the required inspection sheets will be submitted to the City Engineer within three (3) working days of the date that the inspection was conducted.

(6) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system.

(7) Erosion and sediment controls identified in the Storm Water Pollution Prevention Plan shall be observed to ensure that they are operating correctly.

(8) Discharge locations shall be inspected to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to the receiving waters.

(9) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site vehicle tracking.

(10) If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of sediment settling ponds, it must be repaired or maintained within three (3) days of the inspection. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection.

(11) If any inspection reveals that a control practice fails to perform its intended function and that another, more appropriate control practice is required, the Construction Site Conservation Plan must be amended and the new control practice must be installed within 10 days of the inspection.

(12) If the inspection reveals that a control practice has not been implemented in the time required by this ordinance it must be installed within ten (10) days from the date of inspection.

(13) If the inspection reveals that a planned control practice is not needed, the record must contain a statement of explanation as to why the control practice is not needed.

(r) Control of Materials and Debris: Site management practices shall be implemented to prevent toxic materials, hazardous materials, or other debris from entering the City of Lakewood's and state's water resources or wetlands. These practices shall include, but are not limited to, the following:

(1) A covered dumpster shall be made available for the proper disposal of construction site waste materials.

(2) The washing of excess concrete material into a street, catch basin, or other public facility or natural resource shall not occur. A designated area for concrete washouts shall be made available and used for all concrete washouts.

(3) All fuel tanks and drums shall be stored in a marked storage area. A dike shall be constructed around this storage area with a minimum capacity equal to 110% of the volume of the largest container in the storage area. All additional requirements of the local fire authority must be followed. If the fuel tanks have a self-contained "dike," the plug will be kept in the "dike" tank at all times.

(4) Any toxic or hazardous wastes and/or contaminated soils must be disposed of according to all applicable environmental laws and statutes. Local health districts and Ohio EPA can provide guidance on these issues.

(5) On a site with a prior industrial land use or a site that is contaminated with gasoline, fuel oil, hydrocarbon based chemicals or other Ohio EPA regulated contaminants, the storm water is considered wastewater. A permit from Ohio EPA is required to address these sites.

(6) Proper permits shall be obtained for development projects on solid waste landfill sites.

(7) Paint, paint washing liquids, excess paints and other paint wastes are considered solid wastes and shall be disposed of in accordance with applicable state regulations. Appropriate handling of these wastes shall occur at the site so as to prevent the discharge of these wastes into surface or ground waters.

(8) Restroom facilities will be provided for site workers at all times that workers are present on the site and during all phases of the construction.

(s) Storm Water Basins: All storm water basins shall be constructed in accordance with the Ohio Rainwater and Land Development manual.

(t) Soil limitations shall be determined by using the current edition of the county soil survey written by the NRCS, USDA.

1339.10 POST-CONSTRUCTION MINIMUM STANDARDS.

The permittee must adhere to all requirements of the current EPA Construction General Permit "Post-Construction Storm Water Management" section. Specific items of the Construction General Permit that the permittee should be aware of and adhere to include the water quality volume calculation, runoff coefficients based on the type of land use, and target drain times for structural post-construction BMPs. In addition, the permittee must also adhere to the following items:

(a) **Storm Water Detention.** The Post-Construction BMP(s) chosen must be able to detain storm water runoff for protection of the stream channels, stream erosion control, and improved water quality.

(b) **Properly Sized BMPs.** The BMP(s) chosen must be sized to treat the water quality volume (WQ_v) and ensure compliance with Ohio's Water Quality Standards

in OAC Chapter 3745-1. The WQ_v shall be equivalent to the volume of runoff from a 0.75-inch rainfall.

(c) **Runoff Rate.** The peak runoff rate from the development area shall not be greater after development than it was before development. The applicant shall provide calculations proving no increase in the runoff rates from the one (1), two (2), five (5), ten (10), twenty-five (25), fifty (50) and one hundred (100) year storms.

(d) **Runoff Volume.** Increases in the runoff volume shall be offset by further restricting runoff rates. Where the land use will be mixed, the runoff coefficient should be calculated using a weighted average. Based on the increase in runoff volume, the applicant shall determine the critical storm for the development area. The runoff rate from the critical storm shall be restricted to the one (1) year pre-development storm runoff rate. The critical storm shall be calculated as follows:

- (1) Determine the total volume of runoff from a one-year frequency, twenty-four hour storm, occurring on the development area before and after development.
- (2) From the volumes in paragraph (A) determine the percent of increase in volume of runoff due to development and, using this percentage, select the critical storm from this table:

Table 4: Critical Storm Selection

The Percentage Increase In Volume Of Runoff Is:		
Equal To Or Greater Than	And Less Than	The 24-Hour "Critical Storm" For Discharge is
0	10	1 Year
10	20	2 Years
20	50	5 Years
50	100	10 Years
100	250	25 Years
250	500	50 Years
500	----	100 Years

(e) **Detention Or Retention Basin Exemption For Redevelopment Or For Expansion Of Existing Facilities.**

- (1) For any development regulated by this chapter, the construction of a detention or retention basin may not be required for the development if the post-development peak discharge for a 100 year frequency 24 hour

storm increases the existing peak discharge by one (1) cubic foot per second or less using the TR-55 method of calculation or other method approved by the City Engineer. The City Engineer can waive this requirement if existing storm sewers and drainage structures can safely handle the expected increase in flow.

(2) Only one (1) exemption will be allowed per parcel. Any subsequent expansion must provide for detention or retention and must include the previously exempted area.

(f) Where the City Engineer determines that site constraints exist in a manner that compromises the intent of this chapter to improve the management of storm water runoff as established in this section, practical alternatives may be used to result in an improvement of water quality and/or a reduction of storm water runoff. Such alternatives must be in keeping with the intent and likely cost of those measures that would otherwise be required to meet the objectives of this section. When possible, all practical alternatives shall be implemented within the drainage area of the proposed development project. Practical alternatives can include, but are not limited to:

- (1) Fees paid in an amount specified by the City of Lakewood, which shall be applied by the City of Lakewood to storm water management practices;
- (2) Implementation of off-site storm water management practices;
- (3) Watershed or stream restoration;
- (4) Retrofitting of an existing storm water management practice;
- (5) Other practices approved by the City Engineer in keeping with the intent of this section.

1339.11 MAINTENANCE.

Any portion of the permanent drainage and soil erosion systems, including on-site and off-site storage facilities that are constructed by the owner, will be continuously maintained into perpetuity.

(a) Maintenance plans shall be provided by the permittee to both the City Engineer and the post-construction operator of the BMP (including homeowner associations) upon completion of construction activities and prior to the City of Lakewood issuing a Certificate of Occupancy and Final Acceptance.

(b) Single Family and Multi-family Residential Developments: For any development containing common area(s) a Homeowners' Association shall be created and placed in the title of the affected lands. The Homeowner's Association or property owner shall be continuously responsible for post-construction maintenance and inspections into perpetuity unless such maintenance and inspection responsibilities become officially accepted by the City of Lakewood.

(c) Apartments, Commercial and Industrial Developments: The plans will clearly state that the owner of the property shall be continuously responsible for post-construction maintenance and inspections into perpetuity unless the City of Lakewood officially accepts such maintenance and inspection responsibilities.

(d) Maintenance Design: All temporary and permanent soil erosion and sediment control practices shall be designed and constructed to minimize maintenance requirements. Multi-use facilities incorporating assets such as aesthetics and recreation may be incorporated into the design of the drainage facilities. All permanent drainage, soil erosion, sediment control, water quality/quantity management systems and BMPs, including on-site and off-site structures and vegetation that are constructed or planted, must be inspected and maintained into perpetuity by the responsible party designated in the plans. Inspections and maintenance will be incorporated periodically throughout the year to ensure that the facilities are properly operational.

(e) **Perpetual Maintenance Inspections.**

(1) The Homeowner's Association or property owner, at its expense, shall obtain one (1) inspection with a written report annually. The written report will be given to the City of Lakewood by May 1st of each and every year after the Best Management Practice (BMP) has been completed. The report shall be stamped by a professional engineer, landscape architect or Certified Professional In Erosion and Sediment Control (CPESC). The report shall include the status of permanent soil erosion, sediment control, water quality/quantity management systems and the status of the related easements. Single Family and Two Family dwellings shall be exempt from the required annual inspections.

(2) **BMPs that have a potential loss of life.** A written and stamped report covering the status of all BMPs that have a potential for loss of life, bodily injury, or damage to structures or infrastructure will be prepared by a professional engineer or other individual possessing a valid state license that authorizes them to design the same type of BMP for construction.

(f) **Inspection and Maintenance Agreement.**

(1) This agreement will be binding on the owner and all subsequent owners of lands served by the approved system of storm water management practices required for the site. Such Agreements shall include all post-construction BMPs, shall be recorded with the deed to the property(ies) within the site, and shall provide and stipulate the following:

- A. The location of each storm water management practice;
- B. The method of funding long-term maintenance and inspection of all storm water management practices;
- C. Features of the design that facilitate maintenance of the practice, including a written plan for providing an area for dewatering of dredged sediment, or the need to truck sediment from the site;
- D. Long-term maintenance plans, requirements and inspection schedules, which plans must ensure that pollutants collected within structural Post-Construction BMP practices be disposed of in accordance with local, state and federal guidelines;
- E. The party responsible for long-term maintenance, including repairs;
- F. A prohibition on alteration of the practice without prior written approval from the City Engineer;
- G. Description of any easements required by this chapter;
- H. Permission for the City of Lakewood or its agent to enter upon the property and take whatever action is deemed necessary to maintain facilities that do not perform as specified in the Inspection and Maintenance Agreement, and to be reimbursed by the property owner(s) served by the facility for all expenses incurred within 30 days of receipt of invoice from the City of Lakewood; and
- I. A release of the City of Lakewood from all damages, accidents, casualties, occurrences, or claims that might arise or be asserted against said parties from the construction, presence, existence, or maintenance of the storm water management practices.

(2) Alteration or termination of these stipulations is prohibited. The applicant must provide a draft of this Inspection and Maintenance Agreement as part of the Comprehensive SWMP submittal. Once a draft is approved, a recorded copy of the Agreement must be submitted to the City of Lakewood to receive final acceptance of the site.

1339.12 EASEMENTS.

Future access to floodplains, flood control facilities, runoff drainage ditches and channels, runoff storage facilities, storm sewers and other drainage ways and structures, as required by the City Engineer, shall be secured by means of easements. Easement dimensions noted below may be modified as necessary by the City Engineer upon receipt of adequate documentation showing site-specific restrictions that necessitate modifications.

(a) The easements shall be recorded in the name of the City of Lakewood and, in single-family residential developments, the homeowners association.

(b) Such easements shall be not less than twenty-five (25) feet in width in addition to the width of the ditch, channel, or other facility it is to serve. Access easements of this type shall be provided on one (1) side of the flood control or storm drainage ditch, channel, or similar type facility.

(c) Access along the initial drainage system shall be by means of easements. Such easements shall be not less than twenty-five (25) feet in width, with a minimum ten (10) foot width on either side of the drainage system.

(d) Access adjacent to storage facilities shall consist of a twenty-five (25) foot easement in the case of detention (dry) basins, and a twenty-five (25) foot easement with a twenty-five (25) foot level bench in the case of retention (wet) basins, measured from the top of the bank, and shall include the storage facility itself.

(e) Easements for the emergency flow ways shall be a minimum of twenty-five (25) feet in width, or larger if required by the City Engineer.

(f) Flood control or storm drainage easements containing underground facilities shall have a minimum width of twenty-five (25) feet, with a minimum ten (10) foot width on either side of the facility.

(g) The legal description of the easements shall restrict the planting of trees, shrubbery or plantings with woody growth characteristics, and shall also restrict the construction of buildings, accessory buildings, fences, walls or any other obstructions to the free flow of storm water and the movement of inspectors and maintenance equipment. Any variations to the final grade from that described by the grading plan shall be as approved by the City Engineer.

1339.13 CONSTRUCTION AND MAINTENANCE GUARANTEE.

(a) All permanent storm water, soil erosion, other wastes control, and water quality practices not specifically waived by the City of Lakewood shall be constructed

prior to the granting of Final Acceptance. Upon the request of the owner, the City of Lakewood may allow the construction or installation of a permanent storm water, soil erosion, sediment, or other wastes control or water quality practice to be deferred where, in the City Engineer's judgment, such proper construction or installation is not immediately necessary for the protection of the public health and safety; and where the prior installation or construction of such improvement would constitute an undue hardship on the owner because in the case of new vegetation or weather conditions, or because in the case of concrete, building construction could cause cracking and excessive wear and tear on new structures. In such event, the City of Lakewood shall require a Security Bond, Escrow Account, Certified Check or Cash to guarantee that such deferred improvements will be properly constructed or installed within an agreed specified time, but not to exceed six (6) months after the Final Acceptance.

(b) **The Guarantee.** The Construction and Maintenance Guarantee will be in the form of a Security Bond, Escrow Account, Verified Check or Cash. Ohio municipalities and counties may require performance bonds or other guarantees for water management improvement as stated in Chapter 711.101 of the Ohio Revised Code.

(1) No soil disturbing activities shall be permitted until the Guarantee has been posted to the satisfaction of the City Engineer.

(2) The Guarantee will be maintained in an amount of not less than 120 percent of the estimated cost to construct all temporary and permanent storm water BMPs. The estimate shall be certified by a licensed Professional Engineer and approved by the City Engineer.

(3) The Guarantee will be used by the City of Lakewood to complete any construction or removal of improvements or temporary and permanent soil erosion, sediment, and other wastes control practices that are not adequately completed, maintained or removed by the owner in a timely manner, as determined by the City Engineer.

(c) **Time Extension.** The City Engineer may extend for cause the time allowed for the installation of the improvements for which the Guarantee has been provided with the receipt of a written request from the owner.

(d) **Completion.** The owner shall notify the City Engineer upon completion of all construction improvements or temporary and/or permanent soil erosion, sediment, and other wastes control practices and the removal of the temporary soil erosion, sediment, and other wastes control practices for which the guarantee has been provided.

(e) **Final Acceptance.** The City of Lakewood will grant Final Acceptance and release the Guarantee when the following criteria are met:

- (1) Final Stabilization is achieved, as approved by the City Engineer;
- (2) All water quality BMPs are installed and functioning as per the approved SWMP, as witnessed by the City Engineer during an as-built inspection;
- (3) An As-Built SWMP is approved by and filed with the City Engineer, which As-Built SWMP shall include, at a minimum:
 - (4) Location and dimensions of all permanent BMPs;
 - (5) Maintenance requirements of each BMP;
 - (6) Identification of the entity responsible for long-term maintenance; and
 - (7) Signature, seal and date approved by a Professional Engineer.

(f) An approved Inspection and Maintenance Agreement is filed with the Building Department. The agreement must be signed by the contractor, City of Lakewood and the private owner or homeowner's association who will take long-term responsibility for the permanent BMPs.

1339.99 PENALTIES.

(a) No person shall violate, or cause, or knowingly permit to be violated, any of the provisions of this chapter, or fail to comply with any such provisions or with any lawful requirements of any public authority made pursuant to this chapter, or knowingly use or cause or permit the use of any lands in violation of this chapter or in violation of any permit granted under this chapter.

(b) Whoever violates or fails to comply with any provision of this regulation is guilty of a misdemeanor of the first degree and shall be fined no more than one thousand dollars (\$1,000.00) or imprisoned for no more than one hundred eighty (180) days, or both, for each offense.

(c) A separate offense shall be deemed committed each day during or on which a violation or noncompliance occurs or continues.

(d) Upon notice from the City Engineer, or designated representative, that a project site does not meet the requirements of this chapter, such work shall immediately stop. Such notice shall be in writing and shall be either hand-delivered or sent by certified mail, return receipt requested, to the owner or person responsible for the development area, or person performing the work, and shall state the conditions under which such work may be resumed; provided, however, in instances where immediate action is deemed necessary for public safety or the public interest, the City Engineer may require that work be stopped upon verbal order pending issuance of the written order.

(e) The imposition of any other penalties provided herein shall not preclude the City of Lakewood, by or through its Law Director and/or any of his or her assistants, from instituting an appropriate action or proceeding in a court of proper jurisdiction to prevent an unlawful development or to restrain, correct or abate a violation, or to require compliance with the provisions of this regulation or other applicable laws, or ordinances, rules or regulations or the orders of the City Engineer.

Section 2. It is found and determined that all formal actions of this Council concerning and relating to the passage of this ordinance were adopted in an open meeting of this Council, and that all such deliberations of this Council and of any of its committees that resulted in such formal action were in meetings open to the public in compliance with all legal requirements.

Section 3. This ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of the public peace, property, health, safety and welfare in the City and for the usual daily operation of the City for the reasons set forth and defined in the preamble to this ordinance, and provided it receives the affirmative vote of at least five (5) of its members elected to Council, this ordinance shall take effect and be in force immediately upon its adoption by the Council and approval by the Mayor otherwise, it shall take effect and be in force after the earliest period allowed by law.

Adopted: March 3, 2008



President of Council



Clerk of Council

Approved: March 6, 2008



Mayor