CITY OF OAK GROVE, KENTUCKY

ORDINANCE NO. 2016-01

AN ORDINANCE OF THE CITY OF OAK GROVE, KENTUCKY ADOPTING STORMWATER REGULATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR LAND DISTURBANCE ACTIVITIES AND SITE WORK CONSTRUCTION, ILLICIT DISCHARGE DETECTION AND ELIMINATION, AND POST-CONSTRUCTION STORMWATER MANAGEMENT IN THE CITY OF OAK GROVE, KENTUCKY.

WHEREAS, pursuant to KRS §83a.060(9), the following is a summary of City of Oak Grove Ordinance No. 2016-01.

WHEREAS, the Clean Water Act, US Environmental Protection Agency and the Kentucky Division of Water established Phase II Stormwater regulations that mandate local enforcement mechanisms be enacted to comply with those requirements. Three areas are specified for local control.

WHEREAS, the control of erosion and sediment at construction sites is required. During the construction process, soil is highly vulnerable to erosion by wind and water. Eroded soil endangers water resources by reducing water quality and causing the siltation of aquatic habitat for fish and other desirable species. Eroded soil also necessitates repair of sewers, ditches, sinkholes and drywells. Streets and roads with sediment deposits are slick and hazardous to the public. In addition, clearing and grading during construction cause the loss of native vegetation necessary for terrestrial and aquatic habitat. Therefore, this ordinance will establish procedures to address storm water control at land disturbance and construction sites.

WHEREAS, a prohibition of non-stormwater discharges to the storm drainage system is required. This ordinance will establish procedures to regulate the contribution of pollutants to the Municipal Separate Storm Sewer System (MS4) from storm water discharges by any user, prohibit illicit connections and discharges to the MS4, and establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

WHEREAS, land development projects and associated increases in impervious cover alter the hydrologic response of local watersheds and increase storm water runoff rates and volumes, flooding, stream channel erosion, and sediment transport and deposition. This storm water runoff contributes to increased quantities of water-borne pollutants which can be controlled and minimized through the regulation of storm water runoff from development sites. Therefore, this ordinance will establish minimum storm water management requirements and controls to be achieved through post-construction practices.

WHEREAS, the purpose of this ordinance is to provide for the health, safety and general welfare of the citizens of the City of Oak Grove by; minimizing, as much as possible, the dangers of flooding to life and property, the detrimental effects of flooding, and prevent damage to the environment through the regulation of storm water runoff at construction sites and through the control of non-storm water discharges to the storm drain system and the management of storm water discharges from new development and redevelopment projects.

The laws of the Commonwealth of Kentucky shall apply to this ordinance. This ordinance shall apply to all water entering the storm drain system generated on any developed and undeveloped lands within the jurisdiction of the City of Oak Grove unless explicitly exempted by an authorized enforcement agency. This ordinance is applicable to all new development and redevelopment activities resulting in the disturbance of 3,400 square feet or more of land including disturbance of less than 3,400 square feet if development is part of a larger common plan.

NOW, WHEREFORE, it is hereby ordained by the City of Oak Grove, Kentucky as follows:

SECTION I. DEFINITIONS

1. **Accidental Discharge** - means a discharge of spills and dumping or any disposal of materials other than storm water into the system.
2. **Assessment Roll** - is the official listing of assessments of real property maintained by the Christian County Property Valuation Administration Office.
3. **Base Rate** - refers to the Storm Water Management Fee charges on a base unit. The monthly Storm water Management Fee for a single-family residential (SFR) property in the City of Oak Grove equals the base rate.
4. **Best Management Practices (BMP) Plan** - is a plan required by stormwater regulations or permits that includes site maps, an identification of construction/contractor activities that could cause pollutants to be carried away from the site by stormwater, and a description of measures or practices to control those pollutants.
5. **Blue Line Streams** - refers to streams that are represented on the United States Department of the Interior Geological Survey 1:24,000 quadrangle maps.
6. **Capacity** - refers to the volume of a detention facility expressed in acre-feet, the maximum flow through a tile expressed in cubic feet per second (CFS) or the maximum flow through a ditch or swale expressed in cubic feet per second (CFS).
7. **Channel** - refers to a natural or constructed/manmade watercourse with definite bed and banks to confine and conduct continuously or periodically flowing water. Channel flow is that water which is flowing within the limits of the defined channel. –"Channel" refers to a natural stream of water with a top of bank width greater than 10-feat.
8. **Channel Equilibrium** - refers to the state of channel for which the sediment inflow is equal to the sediment outflow.

9. **Check Dam** - means a riprap dam which is placed within a drainage way to reduce the energy of storm water runoff.
10. **City** - when referred to shall represent the City of Oak Grove Government.
11. **Clean Water Act (CWA)** - refers to the federal Water Pollution Control Act (33 U.S. C. § 1251 *et.seq.*), and any subsequent amendments thereto.
12. **Clearing** - refers to any activity that removes the vegetative surface cover.
13. **Controlled Release Structure** - refers to a facility constructed to regulate the peak discharge and velocity of storm water runoff leaving or being discharged from a development during and after a rainfall event.
14. **Critical Area** - refers to a site that is difficult to stabilize due to exposed topsoil, steep slope, extent of exposure, or other conditions.
15. **Damage** - refers to the quantifiable property losses due to storm water runoff downstream of the development which has greater peak discharge and velocity that the pre-development flow.
16. **Design Frequency Storm Water** - is the difference in pre- and post- development storm water peak discharge which the development/owner is responsible to manage for the design storm event for the site.
17. **Design Storm Event** - refers to the purpose of this ordinance, the developer/owner is responsible for the 2-year, 10-year, and 100-year storm events with a duration 24-hours.
18. **Detention** - means the temporary delay of storm runoff prior to discharge into receiving waters.
    -"Detention" refers to the hindering flow or storm water off a developed site to ensure post-development peak runoff is equal to or less than pre-development peak runoff.
19. **Detention Basin** - shall mean a drainage facility constructed to restrict the runoff of storm water to a prescribed maximum rate and to detain for a specific period of time the excess waters which accumulate upstream from the outlet structure.
20. **Detention Facility** - is a structure or area designed to detain design frequency storm water runoff on-site and then release the runoff at a controlled rate from a specified discharge point.
21. **Developed** - refers to manmade conditions which result in buildings, structures, dredging, filling, grading, paving, or other operations that increase peak discharge and velocity of storm water runoff.
22. **Developed Property** - refers to real property which has been altered from its natural state by the addition of any improvements such as buildings, structures or other impervious area.
23. **Developer** - refers to any individual, firm, corporation, association, partnership, or trust involved in commencing proceedings to affect development of land for themselves or others.
24. **Developer/Owner** - refers to the person, firm or corporation who is the owner or is acting as agent in the request for a building/zoning permit.
25. **Development** - for the purposes of this Ordinance, development will be a building, structure, dredging, filling, grading, paving, or other operation which alters the existing or natural conditions of the site.

26. **Discharge** - unless indicated otherwise, refers to discharges from the (MS4), subject to Section 402 of the CWA.
27. **Ditch** - refers to a long narrow excavation dug in the earth for drainage with a top of bank width less than 10-feet.
28. **Drainage Basin** - refers to land that provides surface water runoff into a stormwater management system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.
29. **Drainage System** - refers to the channel ditch, catch basins, pipes and other appurtenances which carry, manage, discharge and control storm water runoff on and off site.
30. **Drainage Way** - refers to any channel that conveys surface runoff throughout the site.
    -"Drainage Way" refers to a swale, ditch, or channel.
31. **Drainage/Dry Well** - means a bored, drilled, driven, dug, or naturally occurring shaft or hole with a depth greater than the largest surface dimension; used to drain surface fluid, primarily stormwater runoff, into a subsurface formation.
32. **Engineer** - shall mean a person licensed as a Professional Engineer in the Commonwealth of Kentucky in accordance with KRS 322.
33. **Ephemeral Stream** - refers to a stream or part of a stream that flows only in direct response to precipitation or snowmelt. Its channel is above the water table at all times.
34. **Equivalent Residential Unit (ERU)** - refers to the average impervious surface area associated with a single-family residential property in the City of Oak Grove.
35. **Erosion** - is the wearing away of land surface by the action of wind, water, gravity, ice, or any combination of those forces.
    -"Erosion" refers to the detachment of soil or rock fragments by water, wind, ice, and gravity.
36. **Erosion Prevention and Sediment Control (EPSC) Plan** - refers to a set of plans prepared by or under the direction of a qualified professional in the State of Kentucky indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.
37. **Excavation** - refers to any portion of land surface or area from which earth has been removed or will be removed; the depth below original ground surface to remaining surface.
38. **Existing Grade** - means the slope or elevation of existing ground surface prior to cutting or filling.
39. **Fee or Storm Water Management Fee** - is the charge to the property owner established under this Ordinance and levied on owners of parcels or pieces of real property to fund the costs of storm water management; the operating, maintaining, and improving of the storm water system and executing the NPDES permit program.
40. **Fill** - refers to a portion of land surface or area to which soil, rock, or other materials have been or will be added; height above original ground surface after the material has been or will be added.

41. **Finished Grade** - means the final slope or elevation of the ground surface after cutting or filling.
42. **Fiscal Year** - refers to July 1 of the calendar year to June 30 of the next year, both inclusive.
43. **Flap Gate** - refers to a gate that opens and closes by rotation around a hinge or hinges at the top of the gate permitting the storm water to pass only in one direction.
44. **Flood Plain** - means the relatively flat or lowland area adjoining a river, stream, watercourse, lake or other body of standing water which has been or may be covered temporarily by floodwater. For purposes of this ordinance, the flood plain is defined as the 100-year floodplain having a one percent chance of being equaled or exceeded in any given year.
45. **General Permit for Construction Activities** - (KYR10 Permit) is an agreement between the regulating authority (Kentucky Division of Water (KYDOW)) and the permittee which specifies conservation practices that shall be implemented in the construction of activities specified in the terms and conditions of the general permit.
46. **Grading** - refers to any stripping, cutting, filling or stockpiling of earth or land, including the land in its cut or filled condition, to establish new grades.
47. **Green Infrastructure** - is an adaptable term used to describe an array of products, technologies, and practices that use natural systems – or engineered systems that mimic natural processes – to enhance overall environmental quality and provide utility services. As a general principal, Green Infrastructure techniques use soils and vegetation to infiltrate, evapotranspirate, and/or recycle stormwater runoff. When used as components of a stormwater management system, Green Infrastructure practices such as green roofs, porous pavement, rain gardens, and vegetated swales can produce a variety of environmental benefits. In addition to effectively retaining and infiltrating rainfall, these technologies can simultaneously help filter air pollutants, reduce energy demands, mitigate urban heat islands, and sequester carbon while also providing communities with aesthetic and natural resource benefits.
48. **Gross Impervious Area** - refers to the total area for which measurable infiltration or absorption into the soil is not likely to occur. These areas include but are not limited to roofs, driveways, and road surfaces.
49. **Headwater** - refers to the height of the water surface above an inlet.
50. **Hydraulically Most Remote Point** - is that point in the watershed from which the travel time of water particle to the outlet is the greatest.
51. **Illegal Discharge** - means any direct or indirect non-stormwater discharge to the storm drain system, except as exempted in this ordinance.
52. **Illicit Connection** - means any discharge to the storm drain system that is not composed entirely of stormwater except discharges pursuant to a KPDES permit (other than the KPDES permit for discharges from the municipal separate storm sewer and discharges resulting from fire fighting activities or other *de minimis* activities allowable under the MS4 regulations) and other discharges referenced in 40 CFR 122.26(d)(2)(*iv*)(B)(1).

53. **Impervious Surface** - is a term applied to any ground or structural surface that water cannot penetrate, or through which water penetrates with great difficulty.
    -"Impervious Surface" refers to the asphalt, concrete, or any other surface which does not allow measurable infiltration or absorption into the soil.
54. **Impervious Surface Area** - refers to the number of square feet of impermeable surface covered by buildings, driveways, patios and other impervious surfaces within a parcel's boundaries.
55. **Industrial Activity** - means activities subject to KPDES Industrial Permits as defined in 40 CFR. Section 122.26(b)(14).
56. **Land Disturbance** - means the purposeful act of clearing, grubbing, excavating or grading; disrupting ground surface by or for construction activities, including construction/access roads, staging, and storage sites producing significant areas of exposed soil and soil piles.
57. **Maintenance** - refers to the act of preserving or retaining a structure or entity in the original condition or form.
58. **Multi-Family Dwelling** - is a building composed of three or more dwelling units.
59. **Municipal Separate Storm Sewer System** - (MS4) means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains) owned or operated by a state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity that discharges to the waters of the Commonwealth; designed or used for collecting or conveying stormwater; which is not a combined sewer; and which is not part of Publicly Owned Treatment Works (POTW) as defined in 40 CFR 122.2
60. **Multi-Stage Outlet** - refers to a storm water control device which regulates the discharge at more than one headwater elevation.
61. **MS4 representative or their designee** - refers to a person designated by the City of Oak Grove to implement provisions of this ordinance, as well as other applicable permits issued by the KYDOW or the City of Oak Grove for the control of stormwater.
62. **National Pollutant Discharge Elimination System (NPDES)** - Permits are part of EPA's program to control the discharge of pollutants to waters of the United States. NPDES is a part of the Federal Clean Water Act (CWA), which requires point and non-point source dischargers to obtain NPDES permits.
63. **Natural Drainage** - is water which flows by gravity in channels, ditches, or swales formed by the surface topography of the earth prior to changes made by man.
64. **NPDES Phase II Permit**- refers to The National Pollution Elimination System Phase II Storm Water Permit as mandated by the United States Environmental Protection Agency.
65. **Non-Developed Property** - is any property that is not altered from its natural state.
66. **Non-Point Source** - refers to diffuse pollution sources (i.e. without a single point of origin or not introduced into a receiving stream from a specific outlet). The pollutants are generally carried off the land by storm water.

67. **Non-Single-Family Residential (Non-SFR) Property** - refers to developed property other than single-family residential property. Such property shall include, but not limited to, multi-family dwellings, commercial properties, industrial properties, parking lots, hospitals, schools, churches, recreational and cultural facilities, hotels and offices.
68. **Notice of Intent (NOI)** - is a formal application of notice to the KYDOW that a construction project seeking coverage under a KYR10 General Permit is about to begin.
69. **Notice of Termination** - is a formal notice to KYDOW that a construction project is complete and seeking release for the EPSC Plan and the KYR10 General Permit.
70. **On-Site** - refers to the integral area within the boundary of a development.
71. **Perimeter Control** - refers to a barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.
72. **Permitting Agency** - issues permits in conformance with this ordinance. The City of Oak Grove will issue Site Development Permits, Level 1-3 as set forth herein.
73. **Permit Phasing** - refers to the practice of clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.
74. **Permittee** - refers to the person who is responsible for the land disturbing activity, *i.e.* the permit holder.
75. **Person** - except to the extent exempted by this ordinance, refers to any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, city, county or other political subdivision of the State, any interstate body or any other legal body.
76. **Point Discharge** - refers to the release of storm water at a specific location.
77. **Point Source** - refers to a stationary location or fixed facility such as an industry or municipality that discharges pollutants directly into the waters of the Commonwealth.
78. **Pollutant** - refers to anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; discarded or abandoned objects; floatables; pesticides, herbicides and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.
79. **Property Owner/Developer/Applicant** - is the person, firm, partnership or corporation who is the owner of record as listed in the Christian County Property Valuation Administration assessment rolls.
80. **Public Storm Drain** - refers to the drainage system provided and maintained by the City of Oak Grove, designed to help maintain stormwater runoff and inlets for water to travel to holding areas installed to remove excessive water from streets and other areas.
81. **Qualified Professional** - shall mean an individual who is trained and experienced in storm water treatment techniques and related fields as may be demonstrated by

state registration, professional certification, experience, or completion of coursework, as accepted according to this Ordinance which enables the individual to make sound professional judgments regarding storm water control or treatment and monitoring, pollution fate and transport, and drainage planning.

82. **Retention** - refers to the process of collecting and retaining storm water for percolation into the ground.
83. **Retention Basin** - shall mean a drainage facility constructed to contain the runoff of storm water to a prescribed maximum rate/volume to pass into the groundwater system without discharging the retained volume to surface waters except through an emergency bypass under conditions beyond the designed capacity.
84. **Runoff** - refers to the rainfall excess that remains on the earth surface after natural losses from infiltration, evaporation, and transpiration or incidental ponding has occurred.
85. **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 air, water or gravity as a product of erosion.
86. **Sediment Control** - means measures that prevent eroded sediment from leaving the site.
87. **Sediment Load** - refers to the total amount of sediment material present in a given system.
88. **Significant Developments** - refers to the developments required to apply for storm water management.
89. **Significant Impacts** - refers to the increase of storm water runoff downstream above the pre-development rate of flow and volume.
90. **Single-Family Residential (SFR) Property** - refers to the developed property which serves the primary purpose of providing a permanent dwelling unit and which is classified as residential in the Christian County PVA assessment rolls. For the purposes of this ordinance, a duplex shall be considered as one SFR property.
91. **Sinkhole Flood Plain Elevation** - shall be defined as the elevation at the sinkhole lip elevation.
92. **Sinkhole Lip Elevation** - shall be defined as the highest closed contour elevation of a sinkhole. If the elevation is above the sinkhole lip, water will flow outside the sinkhole.
93. **Site** - refers to a parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation subject to erosion or sedimentation as a result of cutting, filling, grading or other disturbance of the soil.
94. **Site Development Permit** - refers to a permit issued by the City of Oak Grove for the construction or alteration of ground improvements and structures required for the control of erosion and runoff as defined by this ordinance.
95. **Site Inspector** - refers to a person who has received specialized training in measures and sequencing to be used to control sediment and erosion on a development site and is qualified to inspect, document and maintain erosion and sediment control practices. The MS4 coordinator or their designee shall be the City of Oak Grove's site inspector.

96. **Site Waste Control** - refers to requirements set forth in this ordinance to control or eliminate wastes from the construction site that may cause adverse impacts to water quality.
97. **Stabilization** - refers to the use of practices that prevent exposed soil from eroding.
98. "Start of Construction" refers to the first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling.
99. **Stilling Basin** - refers to a riprap basin facility placed within a drainage way at a lower elevation to reduce the energy of storm water runoff.
100. **Stop Work Order** - shall mean an order by the City directing a Permittee to suspend all Construction and/or operations except for work related to remediation of the violation.
101. **Storm Water Management** - refers to the planning, design, engineering, construction, regulation, improvement, repair, maintenance and operation of facilities and programs relating to storm water, floodplains, flood control, grading, erosion, pollutant mitigation, dredging, excavating, and sediment control.
102. **Storm Water Management Fund** - is a fund created by this ordinance to operate, maintain, and improve the City of Oak Grove's storm water system and also to execute the NPDES permit program as mandated by the United States Environment Protection Agency.
103. **Storm Water Management Manual** - refers to the manual containing design criteria. or Best Management Practices (BMP's for erosion control and storm water quality best management practices. Copies can be obtained from the City of Oak Grove.
104. **Storm Water Management System** - shall mean natural or manmade structures or facilities that are intended for the collection, conveyance, storage treatment and disposal of storm water runoff. Storm water management systems include but are not limited to ditches, streams, inlets, curbs and gutters, detention, retention, storm water quality management practices, storm sewers, culverts, bridges, and sub-surface drainage courses.
105. **Storm Water Pollutant Prevention Plan (SWPPP)** - means a site-specific, written document that (1) identifies potential sources of stormwater pollution at the construction site; (2) describes practices to reduce pollutants in stormwater discharges from the construction site; and identifies procedures the operator will implement to comply with the terms and conditions of a construction general permit (KYR10).
106. **Storm Water Quality Management Plan** - is the written plan that details the "Storm Water Quality Management Program". The "Plan" is considered a single document, even though it actually consists of separate programs. Programs include but are not limited to: EPSC, P-SWPPP
107. **Storm Water Quality Management Practices** - refers to the Best Management Practices used for the purpose of improving the quality of storm water runoff from a development.
108. **Storm Water Quality Management Program (SWQMP)** - refers to a comprehensive program to manage the quality of stormwater discharged from the municipal separate storm sewer system.

109. **Storm Water Runoff Release Rate** - refers to the rate at which storm water runoff is released from dominant (upstream) to servient (downstream) land.
110. **Storm Water System** - refers to the primary system or network of storm and surface water management facilities including, but not limited to, inlets, conduits, manholes, natural streams, sinkholes, channels, ditches, drainage easements, retention and detention basins, infiltration facilities, natural waterways, injection wells and sediment traps. Public roads and public sidewalks are considered part of the storm water collection system.
111. **Swale** - is a shallow drainage conveyance designed for flow depths less than one foot.
112. **Temporary Protection** - refers to short-term stabilization of erosive or sediment producing areas.
113. **Time of Concentration** - refers to the time it takes for a particle of water to travel from the hydraulically most remote point of the water shed to the outlet.
114. **Total Maximum Daily Load (TMDL)** - means the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background. If receiving water has only one point source discharger, the TMDL is the sum of that point source wasteload allocation plus the load allocations for any nonpoint source pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measure.
115. **Vegetative Protection** - refers to the stabilization of erosive or sediment producing areas by covering the soil with appropriate plant materials, including permanent seeding for long-term vegetative cover, short-term seeding for temporary vegetative cover, sodding, producing areas covered with a turf of perennial sod-forming grass, tree planting, or other planting.
116. **"Water"**, for the purpose of this ordinance, is referred to as storm water, surface water, snow melt, or groundwater.
117. **"Water or Waters of the Commonwealth"** as defined in KRS 224.01-010(33) means and includes any and all rivers, streams, creeks, lakes, ponds, impounding reservoirs, springs, wells, marshes, and all other bodies of surface or underground water, natural or artificial, situated wholly or partly within or bordering upon the Commonwealth or within its jurisdiction.
118. **Watercourse** - means any body of water, including, but not limited to lakes, ponds, rivers and streams designated as part of the storm water conveyance system.
119. **Watershed** - refers to the geographic region from which water drains into a particular river or body of water.
120. **Waterway** - means a channel that directs surface runoff to a watercourse or to the public storm drain.

Section II. REQUIREMENTS FOR STORM WATER MANAGEMENT

A. General Objectives and Requirements

1. All significant developments as defined in this ordinance shall be planned, designed and constructed in such a way as to ensure that rain falling on-site shall be absorbed or detained on-site to the extent that, after development, the peak discharge of water leaving the site shall be equal to or less than the peak discharge which was leaving the site prior to development. Post-construction stormwater management facilities in areas undergoing new development or redevelopment are necessary because runoff from these areas has been shown to significantly affect receiving water bodies by the type and quantity of water delivered to the water body during storms.

2. A development shall not change, alter, or modify the land to cause a change in the natural drainage of the land, to create water damages to adjacent property or other landowners in the vicinity, or to cause a decrease in the quality of surface or ground water. Point discharge from on-site shall not create erosion across adjacent land or property or cause obstruction to the property during flooding. Detention basin discharge must be a minimum of 50 feet from the property line unless remedial design measures are submitted and approved. If the point discharge rate of flow is high enough to produce erosion, counter measures (i.e. stilling basin) shall be taken to dissipate flow and reduce erosion. In developments that discharge runoff onto adjacent properties from a point source where prior to development sheet flow was experienced, the Design Engineer shall design a system to spread the discharge over a width that will not adversely impact the adjacent property. Adverse impacts include, but are not limited to the erosion of downstream properties, the deposit of additional sediment load, and the significant disruption of the downstream channel equilibrium.

3. All significant developments as defined in this ordinance shall institute storm water quality management practices to minimize the impact of non-point source pollution caused by urban runoff. These storm water quality management practices must be designed to limit the discharge of storm water pollutants offsite to meet requirements of Part B of this Section. The Storm Water Management Manual should be consulted as a guide in selecting the storm water quality management practices best suited to the needs of specific developments

4. Where it can be demonstrated through sound engineering practices by the developer that a higher peak storm water discharge rate will not adversely affect

properties in the downstream portion of the watershed and/or that the discharge is of higher quality after construction, the City of Oak Grove may permit such discharge as deemed appropriate.

Any other condition not provided for above will require the development's engineer provide technical data showing that the impacts to the downstream watershed would be insignificant, as defined in this ordinance.

5. Developers will be required to plan, design and construct a storm water management system to handle the peak flow of the design storm events and to improve the quality of storm water runoff from developments. Any storm water management system plan, design or facility which does not meet the design requirements of the design storm events or does not provide for adequate water quality controls will be in violation of this ordinance and will not be permitted.

6. Deed Restrictions: The deed restrictions shall be submitted prior to the signing of the Final Plat. The deed restrictions shall contain the following verbiage regarding individual lot owner's responsibility for the maintenance of lot:
"All easements marked" utility and drainage," "drainage easement," or existing drainage swales within building setback line along any street within the subdivision and natural drains shall be properly maintained continuously by each individual lot owner for the benefit of all lot owners. No permanent structure of any kind shall be placed over said drainage easement, swales, or natural drains, nor shall the existing contours of any swales or the detention basin be altered or changed by any person so as to interfere, obstruct or retard the flow of surface water through the drainage easements, or swales, or alter the established swale slopes, or create erosion within the existing swale."

B. *On-site Drainage System*

1. An on-site drainage system, as defined by this ordinance, shall be installed for all developments covered by this ordinance. Such a system shall have the capacity to convey storm water which, by natural means, is routed through the site or is generated by development on-site or a combination of both. The capacity for the internal drainage system will be able to transport the peak rate runoff from a 25-year return frequency storm.

2. There shall be no buildings or structures constructed on-site which disturb, change, alter or modify a natural drainage pattern or route unless the on-site internal drainage system planned is designed and constructed to compensate for the changes, and the point discharge is the same as those in existence prior to the development.

3. Land planning design of the development shall address and empathize the preservation of the natural drainage on-site.

4. Open channels shall be protected from erosion by appropriate vegetative cover, lining or other treatment. Earthen channel side slopes shall be no steeper that 3 to 1 when the depth is less than feet and 4 to 1 when the depth is greater than 8 feet. If slopes are riprap or concrete, 2 to 1 slopes shall be acceptable. Any swale, ditch or channel with a side slope greater that 2 to 1 shall have the walls reinforced.

5. For a 100-year storm event, the ponding surface water on local, collector, and arterial streets must not exceed a depth of six inches at the gutter. Water exceeding this shall be designed to overflow into an excess storm water passage. The maximum velocity of water in the deepest part of the gutter shall be ten (10) feet per second, and paved gutters shall have a minimum grade of 0.5 percent.

6. The minimum drainage way slope shall be five tenths of a percent (0.5%). Drainage ways in local drainage systems with slopes less than 1.0% or a velocity of less than 3 feet per second, or a velocity greater than 6 feet per second shall be paved. The local environment and aesthetic conditions must be considered when paving is proposed. Sodded channels shall be required if slopes are greater than 1.0%.

C. ***Storm Water Storage Areas***

1. Storm water storage areas shall be planned, designed and constructed to have a capacity or volume to hold the pre- and post-developed runoff differential of a 100-year storm event measured in acre-feet.

2. Storm water storage areas can be utilized for secondary purposes, such as open spaces, parking lots or other types of uses not affected by flooding. The City of Oak Grove can deny a proposed secondary use if the use is susceptible to flooding or the integrity of the storm water storage area is at risk.

3. The storm water storage area must be designed to contain and safely release or discharge storm water runoff using a multi-stage outlet. The capacity of the storm water storage area shall be sufficient to contain the pre- and post-runoff differential of a 100-year storm event of the development.

4. The storm water storage area shall be designed to reduce or eliminate maintenance of the facility.

5. The storm water storage area shall be designed to coordinate the capacity of the facility with the controlled release rate so that the duration of standing or ponding water within the basin does not exceed 72 hours after the end of the storm event.

6. The storm water storage area, when used in conjunction with a secondary use, shall not store or pond water greater in depth of one and one-half (1 ½) feet and shall be designed to provide 1 foot of freeboard for the first finished floor elevation of any building or structure for a 100-year storm event.

7. Where rooftop storage of storm water is provided, the building shall be provided with adequate structural design to ensure that roof failure does not occur. Overflow areas shall be provided so that the weight of stored storm water will not exceed the structural capacity of the roof.

8. When calculating the capacity of storm water storage areas, only the volume of the pre- and post-development differential shall be considered. Permanent water storage areas shall not constitute compliance with this ordinance in controlling runoff of the design storm event.

D. <u>Detention Facility Design</u>

1. The minimum basin volume required for storm water storage shall be determined from the differential in runoff volume between the pre- and post-development for the 100-year design storm event. The basin volume required to reduce the peak rate of post- development discharge to the peak rate of peak -development discharge must also be considered. The condition which requires the largest basin volume shall control. Basin volume may be dictated by limitation of downstream conditions on a case-by-case basis as determined by the City of Oak Grove. If the basin is to be located directly on a portion of the natural through drainage system, volume calculations must also consider the total system flow reaching the basin.

2. Maximum basin side slope shall be 3 to 1 unless paved or rip-rapped.

3. Low flow channel shall be grass if the channel grade is 1.0% or greater or paved if less than 1%. Low flow channels shall not have less than 0.5% grade.

4. Basin design must include maintenance accessibility and identification of party responsible for maintenance.

5. Requirements of the State Law shall be observed.

6. The Design Engineer shall address provisions for anti-seep collars, wet ponds and outlet protection.

7. Detention basins must be completely within a recorded permanent Detention Basin Easement.

8. Discharge control structures shall be multi-stage and capable of limiting 2-year, 10- year, and 100-year post-development discharges to pre-development peak discharge rates or downstream system capacity and shall be constructed of concrete and other approved materials.

9. The emergency spillway shall be size to accommodate a flow equal to design overflow of 100-year storm post-development discharge without overtopping the dam. Erosion protection must be provided for the spillway and receiving stream.

10. The dam elevation shall not be less than one foot above the 100 -year storage and overflow elevation.

11. Appropriate channel protections must be installed downstream of the basin. Channel protections include but are not limited to stilling basin, check dams, sod, riprap, paved channel, etc.

12. Storage, discharge, and routing calculations for the pre-and post-development 2-, 10-, and 100- year discharges must be submitted to the City of Oak Grove for review and approval.

13. Spillways shall be protected from erosion and shall employ energy dissipation, if necessary.

14. Detention basin outlet structures that discharge into the floodplain must be designed to account for backwater to prevent flood waters from entering the basin. A flap gates or other approved measures must be installed.

15. The detention basin in drainage ways along with the erosion prevention and sediment control measures shall be the first items of construction. The detention basin and drainage way shall be maintained throughout construction to operate as the items were designed to provide storm water management during the construction activity.

16. Design of detention basin to be used as sediment basins during construction must be checked for capacity due to additional run off generated by disturbed site conditions. Proper erosion control measure shall be designed by the Design Engineer and constructed by the Contractor to insure the required detention basin volume is maintained.

E. Sinkholes in Subterranean Water Channels

1. The use of sinkholes or subterranean water channels for direct discharge or storm water generated by a development, as defined by this ordinance, shall not be permitted. A sinkhole or subterranean water channel may be used to drain a storm water storage area through the release structure after controlled rate (volume divided by time) of water entering into the sinkhole prior to development.

2. No person, firm, or corporation shall commence alterations, improvements or other disturbances of a sinkhole or known subterranean water channel without approval from the City of Oak Grove. Any person, firm or corporation proposing alteration, improvements or other disturbances of a sinkhole or known subterranean water channel, shall submit detailed plans to the City of Oak Grove, showing that said alterations, improvements or disturbances shall not decrease the water-handling capacity of the sinkhole or subterranean water channel, or limit or interfere with the drainage capability of the sinkhole or subterranean water channel. Erosion control plans and methods must be shown for any activities which might create erosion or sedimentation. This submittal does not eliminate the requirement for the developer to obtain all pertinent permits from state and federal government review agencies.

3. Sinkholes shall not be altered or covered in any way which would negatively affect the drainage capabilities of the sinkhole. Development within the 100-year floodplain of a sinkhole shall not be permitted. The 100-year floodplain of a sinkhole shall be determined from the county drainage maps (where available) or from a separate hydrologic analysis. Where the 100-year floodplain delineation is not available, it shall be determined, using runoff volume for the 100-year storm event, computed by the Soil Conservation Service Curve Number Methods and assuming no outflow through the sinkhole. Any development within the Sinkhole Floodplain elevation shall have the following note place on all plats and deeds, "**DEVELOPMENT IS WITHIN A POTENTIAL FLOOD HAZARD AREA.**"

4. The storage volume required for a storm water storage area drained by a sinkhole shall be calculated by assuming zero discharge. The storage volume for the post-developed condition shall be such that the elevation of water impounded on adjacent properties is equal to or less than the elevation of water impounded for the pre-developed condition.

5. Any alterations, improvement or disturbance of a sinkhole or subterranean water channel undertaken without approval by the City of Oak Grove, shall be considered a violation of this Ordinance and subject to the fines and penalties provided in Section IV.

F. Required Application

1. An application for storm water management is required for Significant Developments as identified below:

    a. The developer/owner or propose commercial/Industrial/Professional or other (Non-Residential) developments or redevelopment, shall submit storm water management plans for:
        i. Any construction located on a tract of land less than one acre in area which has proposed improvements that cause new impervious surface to exceed 10,000 square feet. Gross and purveyors area will be used to compute the impervious surface.
        ii. Any construction located on a tract of land of one acre or more.

    b. The Developer/Owner of propose residential developments or re-developments shall submit storm water management plans for:
        i. Any construction located on a tract of land less than one acre in area which has proposed improvements that cause new impervious surface twos exceed 5,490 square feet. Gross impervious area will be used to compute the impervious surface.
        ii. Any construction located on a tract of land greater than one acre in less than two acres in area which has proposed improvements which caused the new impervious surface to exceed 10,000 square feet. Gross impervious area will be used to compute the impervious surface.
        iii. Any construction located on a tract of land of two (2) acres or more, proposed for subdivision into two (2) or more lots.

    c. If there is an existing downstream flooding or potential flooding situation within the watershed the requirements of a storm water management plan shall be at the discretion of the City of Oak Grove the determination of an existing flooding or potential flood situation we based on historical data and/or hydrologic and hydraulic analysis.

    d. The Developer/Owner of Additions to Existing Structures shall submit storm water management plans for:
        i. Any construction located on a tract of land less than one acre in area which has proposed improvements that will cause the existing and new impervious surface to exceed 10,000 square feet. Gross roof area will be used to compute the impervious surface.
        ii. Any addition to an existing structure located on attractive land of one acre or more.

2. The application will include plans, construction drawings, and calculations for the management of storm water, as provided for by this ordinance, in such detail to

enable the City of Oak Grove to determine compliance. The hydraulic calculations shall include:

a. Watershed area
b. The pre-development run-off coefficient
c. Post-development run-off coefficient
d. Pre-development design rainfall
e. Post-development design rainfall
f. Stage-storage curve for detention basin
g. Stage-discharge curve for detention basins, and
h. Pre-and post-development drainage patterns for the site.

3. The methods:
   a. The storm water runoff and storage capacity shall be calculated by using the SCS Method or any other method which receives prior approval by the City of Oak Grove. Approval all of alternative methods will be based on the Design Engineer providing documentation demonstrating that the method is applicable.

4. The Application shall include measures which outlined maintenance responsibilities for the detention facilities and other structures. Upon final approval of construction plans, a Storm Water Facilities Maintenance Agreement will be signed and recorded by the owner prior to insurance of a grading permit.

5. The drainage system shall be legally defined on both feet and plat.

6. The applicant is required to dedicate easements along those drainage ways necessary for adequate watershed drainage, maintenance and operations.

7. Each application must be on a form furnished by the City of Oak Grove, submitted in at least three (3) copies and each be accompanied by a map to determine location of the proposed sites. At least one (1) copy of the application, maps and other attachments are to be retained for the City of Oak Grove files by the City of Oak Grove.

8. Prior to any construction, the developer shall submit storm water plans to review in accordance with Subsection A in this section and in accordance with the Storm Water Management Manual as directed by the City of Oak Grove. The developer shall pay a review fee based on the following schedule to the City:

Less than 2 acres	*$300*
2–4.99 acres	*$500*
5+ acres	*$1500*
Subdivision with less than 50 lots	*$600*
Subdivision with 50 or more lots	*$1400*

If any subdivision or site plan is required to be reviewed four (4) times or more than an additional one hundred dollars ($100.00) will be charged for each review thereafter.

9. When it has been determined that the applicant has efficiently met the requirements, permits will be issued for proposed improvements to be carried out.

10. The Developer/Owner, as part of the application, will submit a cost estimate covering the cost of installation of the storm water management facility in plan.

11. Upon approval of the cost estimate by the City of Oak Grove, the Developer/Owner will provide a surety instrument in the amount of agreed upon cost estimate to the City of Oak Grove. The surety instrument will be approved by the City of Oak Grove as to form and content.

12. The application will be signed and certified by a licensed Engineer, and Developer/Owner. Failure of a licensed engineer and the Developer/Owner to sign and certify the application will result in an incomplete application and will not be processed.

13. This surety instrument will be released when the license Engineer and Developer/Owner signs in certifies that the plan has been implemented, as approved at the end or completion of the development, not the completion of the storm water management facility. The City's representative must determine that the facility has been constructed in accordance with this ordinance before the surety instrument will be released. Failure of the licensed engineer and Developer/Owner to have "as built" signed and certified will be considered as an act of default, and the City of Oak Grove will have the option of exercising its authority pursuant to the surety instrument.

G. ***Variance***

1. The City of Oak Grove, upon recommendation by the City of Oak Grove, may grant variances to the applicant from the regulation specified in this ordinance. The applicant must specify hardships to result in following the prescribed regulations. The City of Oak Grove must been examined and decide the Valatie of the proposed hardships. This request is been submitted to the Oak Grove City Council.

2. The variance will be granted only upon showing data submitted by a licensed Engineer that there is good and sufficient cause that failure to grant the variance would result in flooding or significant downstream impacts which would be contrary to the spirit and intent of this ordinance. Financial hardship to the property owner shall not constitute proper or appropriate grounds for a variance under this Section.

3. A record of all variance action shall be maintained by the City of Oak Grove, including the justification for issuance.

4. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places of the State Inventory of Historic Places without regard to the procedures set forth in this section.

Section V. EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRICTION ACTIVITES

A. Permitting Requirements for Site Development

1. Any person desiring to disturb land or commence construction activity must submit an appropriate application and receive an approved permit from the City of Oak Grove before the project can commence. Design requirements and EPSC Plans shall be prepared in accordance with Section 1. Parts B.-F. of this ordinance. Each permit application shall include a statement that any land clearing, construction, or development involving the movement of earth shall be in accordance with an approved plan and that a qualified contractor/developer, permittee or their designee shall be responsible for implementing and maintaining all aspects of the approved plan. Incomplete applications shall be remanded back to the property owner for corrections and resubmittal.

2. Site Development Permits issued by the City of Oak Grove are required for all site construction projects and/or land disturbances. Depending on the amount of land disturbance and other site characteristics, various levels of permits (Level 1 – 3) will be issued. In addition, the permittee or property owner shall coordinate with the KYDOW and the US Army Corp of Engineers to determine whether permits are required from those agencies before construction begins. Criteria for City of Oak Grove permit levels and application requirements are as follows:

a. Level 1 Permit

(1.) Criteria for Level 1 Site Development
- (i) Site construction disturbs less than one acre of soil and is not a part of a larger development;
- (ii) Increased impervious area is less than 3,400 square feet;
- (iii) Ground slopes are less than six percent (6%)

(2.) Application Requirements for Level 1 Site Development

(i) Submit a completed Level 1 Site Development Permit Application accompanied by a plot plan that shows appropriate erosion protection and sediment control notations and practices;
(ii) Non-refundable permit fee of $50.00 with completed application

b. Level 2 Permit

(1.) Criteria for Level 2 Site Development
(i) Site construction disturbs less than one acre of soil and is not part of a larger development;
(ii) Increased impervious area is greater than 3,400 square feet;
(iii) Ground slopes are less than 6%

(2.) Application Requirements for Level 2 Site Development
(i) Submit a completed Level 2 Site Development Permit Application accompanied by a plot plan that shows appropriate erosion protection and sediment control notations and practices;
(ii) Non-refundable permit fee of $100.00 with completed application

c. Level 3 Permit

(1.) Criteria for Level 3 Site Development
(i) Site construction disturbs more than one acre of soil or is part of a larger Development

(2.) Application Requirements for Level 3 Site Development:
(i) Submit a completed Level 3 Site Development Permit Application accompanied by NOI; access to plans and other documents required by a KYR10 Permit
(ii) Non-refundable permit fee of $150.00 with completed application

d. Site Development Application Review

(1.) The City of Oak Grove's MS4 representative or their designee will review each permit application to determine its conformance with the provisions of this ordinance. Acceptance indicates that minimum requirements or intent are met and does not imply a guarantee of performance. The MS4 representative or their designee reserves the right to inspect the site prior to any construction activities in furtherance of the review process. Based on review of the permit application, the City of Oak Grove may:
(i) Accept the permit application as submitted;
(ii) Accept the permit application subject to such reasonable conditions as may be necessary to meet the requirements/intent of the objectives of this ordinance;

(iii) Deny the permit application, indicating the reason(s) and procedure for submitting a revised application and/or any additional information required.

e. Pre-Construction Inspection and Permit Issuance

(1.) Following acceptance of the permit application, the applicant will be authorized to install the EPSC measures included in the application. Upon completion of these installations, the applicant shall contact the MS4 representative or their designee to schedule a Pre-Construction Inspection. Upon completion of the Pre-Construction Inspection and approval of EPSC measures installed, the Site Development Permit will be issued and site construction may commence.

(2.) The City will not issue a Building Permit until the required Site Development Permit application is accepted and the appropriate Site Development Permit issued.

f. Permit Duration

(1.) Permits issued under this section shall be valid from the date of issuance through the date the City of Oak Grove notifies the permit holder that all storm water management practices have passed the final inspection required under permit conditions and/or a Notice of Termination has been filed with the KYDOW.

g. Permit Exemptions

(1.) The following activities are exempted from permit coverage under this ordinance:

(i) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources, and
(ii) Existing nursery and agricultural operations including family gardens conducted as a permitted main or accessory use.

B. Erosion Prevention and Sediment Control (EPSC) Plan

The designer and/or engineer is ultimately responsible for the details of design of any EPSC Plan required, with the property owner/developer being responsible for implementation and performance of the design as installed. The EPSC Plan shall include the following:

(1) EPSC Plan Requirements for a Level 1 or Level 2 Site Development Permit
(a) A plot plan that shows general erosion protection and sediment control notations and practices.

(2) EPSC Plan Requirements for a Level 3 Site Development Permit

(a) A natural resources map that includes features of concern such as topography, streams or soil types of a scale equivalent to balance of other plan details
(b) A schedule of events for the construction of the development site, including stripping and clearing, rough grading, construction of utilities, infrastructure, final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary EPSC measures, and establishment of permanent vegetation.
(c) All EPSC measures necessary shall be shown on the plan by location and referred to by a legend for all phases of construction. Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season. Multiple EPSC plan sheets may be necessary to best convey requirements for each phase.
(d) Seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and type and quantity of mulching for both temporary and permanent vegetative control measures.
(e) Provisions for maintenance of control facilities, including easements and estimates of the cost of maintenance.
(f) The proposed plan to control site waste, including a delineation of contractor staging areas for equipment and fuel storage, site materials and temporary facilities.

Modifications to the EPSC Plan shall be processed and accepted or denied in the manner described in Section 1., Part A. of this ordinance and may be authorized by the MS4 representative or their designee through written notification to the permittee.

C. Design Requirements for Erosion Prevention and Sediment Control

(1.) Any permitted land disturbance operation shall meet the design criteria set forth in the most recent edition of the *Kentucky EPSC Field Guide*, and shall be adequate to prevent erosion and control sediment from the site to the satisfaction of the MS4 representative or their designee. Cut and fill slopes shall be no greater than 3:1 (horizontal to vertical), slope shall be stabilized with rock rip-rap or synthetic material, except as approved by the MS4 representative or their designee to meet other community or environmental objectives. Site specific variables such as topography, soil erodibility, storm water management features, and vegetation shall be considered when developing an erosion control plan.

(2.) Clearing and grading of natural resources, such as forests and wetlands, and other natural features of concern, shall not be permitted, except when in compliance with all sections of this ordinance, as well as any regional, state and federal regulation. Clearing techniques that retain natural vegetation, drainage patterns, and buffers along streams as described by the *Kentucky EPSC Field Guide*, shall be used to the satisfaction of the City of Oak Grove.

All erosion prevention and sediment control measures indicated on the erosion control plan shall be installed prior to disturbance of upstream areas.

(3.) Clearing, except that necessary to establish sediment control devices, shall not begin until all sediment control devices have been installed, stabilized and approved by the MS4 representative or their designee at the Pre-Construction Inspection.

(4.) Phasing shall be required on all sites disturbing greater than 50 acres, and may be required on sites disturbing less than 50 acres, with the size of each phase to be established at plan review and included in the EPSC Plan.

(5.) An erosion control plan shall identify the erosion control practices and sediment trapping facilities which are appropriate for actual site conditions. In addition, the appropriate schedule of implementation shall be identified. Concentrated storm water flows shall be avoided or the conveyance system shall be adequate to prevent significant erosion. Sediment trapping devices are required at all locations where storm water leaves the site laden with sediment. The plan shall identify provisions including but not limited to the following:
(a) Erosion prevention on denuded areas,
(b) Non-structural management practices to be implemented,
(c) Perimeter controls,
(d) Permanent storm water conveyance structures,
(e) Final stabilize conditions of the site
(f) Provisions for maintaining, removing, and re-stabilizing areas controlled by temporary measures,
(g) Maintenance requirements for any permanent measures.

Additional guidelines for selecting, designing, and implementing appropriate erosion prevention and sediment control practices are presented in the *Kentucky EPSC Field Guide.*

D. Best Management Practices Requirements for Erosion Prevention

(1) Soil stabilization shall be completed within fourteen (14) days of final grade work. If an area is left inactive for fourteen (14) days or more the area shall have temporary stabilization as addressed in *Kentucky EPSC Field Guide, Section 4.*
(2) If seeding or other vegetative erosion prevention methods are used, vegetation shall become established within three (3) weeks. If a satisfactory stand of vegetation is not established, the MS4 representative or their designee may require the site to be reseeded or a non-vegetative option employed.
(3) Special techniques such as rip rap, turf reinforcement, armoring and other methods that meet the design criteria outlined in *Kentucky EPSC Field Guide, Section 6* shall be used to ensure stabilization on steep slopes or in drainage ways.

Soil stockpiles must be stabilized or covered and/or have sediment control measures in place to control sediment movement. Stockpiles shall have temporary vegetation established if left undisturbed for twenty-one (21) days or more. At the close of the construction season, the entire site must be stabilized, using a heavy mulch layer or other methods that do not require germination to control sediment and prevent erosion.

(4) Minimize clearing and grading to the smallest possible area. Preserve existing vegetation and trees to the maximum extent possible.

(5) Areas to be left undisturbed during construction shall be clearly noted and delineated on the plans.

(6) Vegetative buffer strips in combination with other perimeter controls as listed in *Kentucky EPSC Field Guide, Section 9* shall be used for the protection of adjacent properties, watercourses and rights of way.

(7) Measures discussed in *Kentucky EPSC Field Guide, Section 5* shall be implemented to control sedimentation deposits into drainage structures and features, receiving water bodies, natural karst features, roads, right-of-ways and adjacent properties.

E. Best Management Practices Requirements for Sediment Control

(1) Dust control techniques shall be employed to prevent the blowing of dust by air movements during land disturbance, demolition, and other construction activities.

(2) Diversion of upland runoff past disturbed slopes shall be implemented when necessary.

(3) Settling basins, sediment traps, tanks and/or perimeter controls shall be implemented as required by the *Kentucky EPSC Field Guide* to control sediment.

(4) Effective debris and trash management shall be required. At a minimum the following shall be met:

(a) Implement waste management practices and disposal of wastes, including a designated waste collection area on site that does not drain directly to a waterway, lidded storage containers, regularly scheduled waste collection to prevent overfilling, immediate cleanup of spills and disposal of construction site waste at authorized landfills or disposal areas. Concrete trucks must wash out on the job site and the runoff be controlled to prevent drainage onto public streets or into the storm water collection system.

(b) Control and disposal plan for hazardous materials utilized or hazardous wastes generated during construction in accordance with local and state solid waste regulatory agencies.

(5) Construction site access requirements designed to minimize the deposit of sediment or other materials on public streets and rights of way shall include:

(a) Continuous access via a stabilized rock entrance, constructed in accordance with *Kentucky EPSC Field Guide*. A stabilized stone pad shall be placed and maintained at any point where traffic will be leaving a construction site to a public right-of-way, street, alley, sidewalk, or parking lot. Stone pads shall contain clean washed stone sizes 2"-4", (6) inches

thick and be minimum fifty feet long. Where site limitations prevent the full installation of a construction exit, the City may approve an alternate design.

(b) A tire wash rack may also be required by the City of Oak Grove. Under no circumstances is construction to allow sediments to leave a construction site in a way that would be a violation of the site or The City of Oak Grove's Kentucky Pollution Discharge Elimination System (K.P.D.E.S.) permit.

F. Protection Requirements for Waterways and Public Storm Drains

(1) Waterway, watercourse, ephemeral stream, and public storm drain protection requirements shall include the following:

(a) If a watercourse will be crossed regularly crossed during construction, a temporary stream crossing shall be installed as approved by the KYDOW and the MS4 representative or their designee.

(b) Stabilization of the watercourse channel shall be made before, during and after any in-channel work.

(c) Stabilization shall be made to adequately prevent erosion at the inlets and outlets of all pipes and paved channels.

G. City Inspections for Sediment and Erosion Control

(1) Plans and permits accepted and issued by the City of Oak Grove for site development shall be maintained on site throughout the duration of the project. The City of Oak Grove's MS4 representative or their designee shall make site inspections as deemed necessary to ensure the EPSC measures are being properly implemented and maintained during construction.

(2) Additionally, the MS4 representative or their designee shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed under Section 1, Part H. below. If minimum requirements of the EPSC Plan are not met, the permittee shall be notified and appropriate enforcement action shall be taken.

(3) The City of Oak Grove's MS4 representative or their designee shall conduct a final inspection to insure compliance with all permit conditions prior to termination of the permit at the completion of the project.

H. Permittee Inspections for Sediment and Erosion Control

(1.) The permittee or his/her agent shall make regular inspections of all control measures to determine the overall effectiveness of the EPSC Plan and the need for additional control measures.

(a) Inspections shall be conducted every seven (7) calendar days and after storm events of a half-inch (1/2") or more of precipitation.

(b) Inspections shall be documented in written/electronic form and kept on the construction site.
(c) Completed inspection forms shall be available for the MS4 representative or their designee or KYDOW inspectors to review upon request during a site inspection.

SECTION IV – ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

A. Prohibition of Illegal Discharges

(1.) Pursuant to the Kentucky Pollutant Discharge Elimination System (KPDES) Municipal Separate Storm Sewer System (MS4) Program, illicit discharges to the MS4 are defined as illegal. Except as hereinafter provided, all non- storm water discharges into the MS4 are prohibited and declared to be unlawful.
(2.) It is unlawful for any person to discharge waters from residential construction activities that are not complying with the Standard of Practice for Residential Construction Stormwater Management as approved and advertised by the City.

B. Prohibition of Illegal Connections

(1.) It is unlawful for any Person to connect any pipe, open channel or any other conveyance system that discharges anything except stormwater or unpolluted water, which is approved by the City, based on exemptions listed as allowable discharges below, to the storm sewer system.

C. Prohibition of Illegal Dumping and Disposal of Materials

(1.) In addition to illicit discharges, the discharge of spills and the dumping and/or disposal of materials other than stormwater, including, but not limited to, unpermitted (KPDES) industrial and commercial wastes, commercial car wash wastes, sanitary sewage, garbage, yard waste, trash, petroleum products, including used motor vehicle fluids, as well as leaf litter, grass clippings, and animal wastes into the storm sewer, whether directly or indirectly, are prohibited.

D. Allowable Discharges to MS4

(1.) The following discharges are exempt from discharge prohibitions established by this ordinance: discharges from emergency fire fighting activities; diverted stream flows; rising ground waters; uncontaminated groundwater infiltration to separate storm sewer systems (as defined by 40 CFR35.2005(20); uncontaminated pumped ground water; discharges from potable water sources as required for system maintenance; drinking water line flushing dechlorinated through City accepted BMPs; air conditioning condensate; uncontaminated landscape irrigation; lawn watering; uncontaminated springs; uncontaminated

water from crawl space pumps; uncontaminated water from footing /foundation drains and pumps; individual residential car washing; flows from riparian habitats and wetlands; swimming pool discharges dechlorinated through City accepted BMPs; street wash water resulting from normal street cleaning operations, controlled flushing of stormwater conveyances contained and treated by appropriate BMPs; dye testing, providing that a verbal notification to the MS4 representative or their designee is given prior to the time of the test; discharges within the constraints of a KPDES permit from the Kentucky Division of Water; and discharges specified in writing by the MS4 representative or their designee as being necessary to protect public health and safety.

E. Documentation of Approved Connections

(1.) Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the storm sewer system, shall be located by the owner or occupant of that property upon receipt of written *Notice of Violation* from the City of Oak Grove requiring that such locating be completed. Such *Notice* shall specify a reasonable time period within which the location of the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other discharge point be identified. Results of these investigations are to be documented and provided to the MS4 representative or their designee and/or other relevant City departments.

F. Industrial or Construction Activity Discharges

(1.) Any person subject to an industrial or construction activity KPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City of Oak Grove prior to the allowing of discharges to the MS4.

G. Monitoring of Industrial/Construction Activity Discharges

(1.) This part applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity;

(a) The City of Oak Grove MS4 representative or their designee shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance.

(b) Facility operators shall allow the City of Oak Grove MS4 representative or their designee ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of a KPDES permit to discharge storm water.

(c) The City of Oak Grove shall have the right to set up on any permitted facility such devices as deemed necessary to conduct monitoring and/or sampling of the facility's storm water discharge.
(d) The City of Oak Grove may require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be calibrated and maintained at all times in a safe and proper operating condition by the discharger at its own expense.

H. Industrial BMPs Required for Storm Water Discharges

(1.) The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of structural and non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional BMPs to prevent the further discharge of pollutants to the MS4. Compliance with all terms and conditions of a valid KPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the terms of this part.

I. Reporting Responsibilities for Accidental Discharges from Industrial Activities

(1.) In the event of any discharge of a hazardous substance in amounts that could cause a threat to public drinking supplies, a spill having a significant impact as defined by the USEPA and Kentucky State Law, or any other discharge that could constitute a threat to human health or the environment, as may be asserted by the City, the owner or operator of the facility shall give notice to the City and the KYDOW as soon as practicable, but in no event more than four (4) hours after discovery of the accidental discharge or the discharger becomes aware of the spill or discharge.
(2.) If an emergency response by governmental agencies is needed, the owner or operator should call 911 immediately to report the discharge. A written report containing the following information must be provided to the MS4 representative or their designee within five (5) days of the time the discharger becomes aware of the spill or discharge:
  (a) A description of the discharge including volumes and concentrations;
  (b) The exact date and times of the discharge; and
  (c) Steps taken to eliminate and prevent recurrence of the discharge

J. Remedial Actions for Accidental Discharges from Industrial Activities

(1.) The industrial discharger shall take all reasonable steps to minimize any adverse impact to the MS4 or Waters of the Commonwealth, including accelerated or additional monitoring necessary to determine the nature and impact of the discharge. It shall not be a defense for the discharger in an enforcement action

to claim that it would have been necessary to halt or reduce the business or activity of the facility in order to maintain stormwater quality and minimize any adverse impact that the discharge may cause.

K. Reporting Responsibilities for Accidental Discharges from Non-Industrial Activities

(1.) In the event of any discharge of a hazardous substance in amounts that could cause a threat to public drinking supplies, a spill having a significant impact as defined by the USEPA and Kentucky State Law, or any other discharge that could constitute a threat to human health or the environment, as may be asserted by the City, the owner, operator, or reporter of the facility shall give notice to the City and the KYDOW as soon as practicable, but in no event more than four (4) hours after discovery of the accidental discharge or the discharger becomes aware of the spill or discharge.

SECTION V – POST-CONSTRUCTION STORMWATER MANAGEMENT

A. Post-Construction Storm water Pollution Prevention Plan Requirements

(1.) Applications for Level 3 Site Development Permits shall include a Post-Construction Stormwater Pollution Prevention Plan (P-SWPPP) to be completed, sealed and signed by a Licensed Professional Engineer and submitted to the MS4 representative or their designee. Applications for Level 2 Site Development Permits may be required to submit a P-SWPPP at the discretion of the MS4 representative or their designee. The P-SWPPP shall include the following:

(a) description of the proposed land use including amount of additional impervious area to be developed, directly connected impervious area, and nature of the development;
(b) Location, dimensions, detailed specifications, including waterway buffers where appropriate, and construction details of all post-construction stormwater quality BMPs as defined in the City guidance documents;
(c) A sequence describing when each post-construction stormwater quality BMP will be installed
(d) A Long-Term Operation and Maintenance Agreement containing maintenance guidelines for all post-construction stormwater quality measures to facilitate their proper long term function. This Agreement shall be recorded as a restricted covenant on the property and thereby made available to future parties, including property owners, who will assume responsibility for the operation and maintenance of post-construction stormwater quality measures. (See requirements in F., below.)

B. *P-SWPPP Design/Performance Criteria*

(1.) The P-SWPPP shall include provisions for stormwater quality BMPs that are designed to achieve the following design/performance objectives:

(a) Current MS4 programs shall, within 12 months of the effective date of this permit, develop and submit to the Division of Water, an on-site stormwater runoff quality treatment standard, to be adopted by ordinance or other regulatory mechanism for all new development and redevelopment projects. The proposed local standard will require, in combination or alone, management measures that are designed, built and maintained to treat, filter, flocculate, infiltrate, screen, evapo-transpire, harvest and reuse stormwater runoff, or otherwise manage the stormwater runoff quality. The permittee shall develop a locally derived water-quality treatment standard that requires new development projects to implement controls to manage runoff through water-quality control structures. The standard shall be based, at a minimum, on an analysis of precipitation records to determine the equivalent surface depth of runoff (e.g. 0.75 inches) produced from an 80th percentile precipitation event. Reduce or buffer increases in stormwater runoff temperatures caused by contact with impervious surfaces;

(b) Reduce or buffer increases in stormwater runoff volume and flow rate caused by increases in directly connected impervious area and overall impervious area;

(c) Storm water detention/retention facilities shall be designed to address the rate at which flow is released over the entire runoff discharge period and the volume of discharge over the critical-design storm period if defined by City stormwater master plans. The outlet structure shall be designed as a v-notch weir or other multiple stage configurations capable of controlling the discharge rates for the first flush, 2-, 10-, 25- and 100-year design storm events.

(2.) Soil bioengineering, "green" and other "soft" slope and stream bank stabilization methods shall receive preference over rip rap, concrete and other hard armoring techniques. Examples are rain gardens and permeable materials.

(3.) Supportive data must be submitted to justify the type of facility selected. The facility may be designed to infiltrate runoff to groundwater rather than transmit it downstream under conditions up to a 10-year storm event. It must be able to bypass all other storms including 100-year events with a discharge rate equivalent to or less than pre-development conditions without negatively impacting the 100-year floodplain above or below the site. If data indicates that the facility cannot retain a significant portion (95%) of the runoff, then the facility must be designed to detain runoff.

(4.) The City reserves the right to require superseding or additional treatment criteria or objectives for specific pollutants as necessary to meet overall stormwater quality management program objectives or directives under a watershed improvement or Total Maximum Daily Load (TMDL) program as administered by the USEPA or KYDOW.

(5.) The design shall include and/or address the following elements:

(a) Area vicinity map showing current zoning, adjoining property owners, and street lines within one hundred feet (100') of the project boundaries all drawn at a scale not greater than 1"=2,000';
(b) North arrow and its basis;
(c) Legend explaining symbols and abbreviations used on the plan;
(d) "Do Not Disturb Limits" for construction activity indicated by a heavy dashed line and labeled as such;
(e) Boundary of site defined by bearings and distances and indicated by a heavy solid line;
(f) Drawing(s) at a scale not greater than 1"=100'. In the case of an unusually large development, a scale of 1"=200' may be acceptable;
(g) Acreage of the total site and acreage of the project site (if different);
(h) Soil classifications;
(i) Existing and proposed runoff coefficients;
(j) Impervious areas as measured in square feet;
(k) Benchmark location(s), description(s) and elevation(s) at sea level;
(l) Basis of elevation datum;
(m) Name, address, and telephone number of the owner, developer, permittee, and project qualified professional;
(n) Existing and proposed topography at two-foot contour intervals;
(o) Mapping accuracy shall conform to National Standards of Mapping;
(p) Location of conservation zones, sinkholes, streams, steep slopes, known springs and watercourses;
(q) Location of any existing buildings or structures;
(r) Location of any pertinent utilities, sanitary sewers, water and storm water facilities on the property within 50 feet of the site;
(s) Elevations, dimensions, locations, and the extent of all planned grading indicated with proposed contours;
(t) A grading plan for borrow pits, quarries and material-processing facilities based on the findings of soil site investigations;
(u) Design details of temporary and permanent structural controls;
(v) Approximate location of the 100-year floodplain or a statement by a Professional Engineer or Professional Land Surveyor that the site is not located in an area subject to flooding. The basis for this determination shall be shown;
(w) A detailed cost estimate for installation and maintenance of all storm water management control measures;

(x) Identification of perimeter controls at outfalls and areas where construction site drainage leaves the property boundary or disturbed area(s);
(y) Arrows indicating drainage flow patterns;
(z) Location, dimensions, detailed specifications, and construction details of all temporary and permanent storm water quality measures;
(aa) Temporary stabilization plans and sequence of implementation including seeding mixture, method of seedbed preparation and kind and quality of mulching;

(bb) Permanent stabilization plans and sequence of implementation including seeding mixtures and rates, types of sod, method of seedbed preparation, expected seeding dates, type and rate of lime and fertilizer application, and kind and quantity of mulching;
(cc) A sequence of construction of the development site, including stripping and clearing, rough grading, construction of utilities, infrastructure, and construction of buildings, final grading and landscaping. Sequencing shall identify the expected date each activity will occur and the expected duration of each. A description should be given describing the relationship between implementation of storm water quality measures and phases of construction activities. Phasing of construction should be performed to limit disturbed areas to twenty (20) acres;
(dd) Anticipated inspection and maintenance requirements for permanent and temporary measures. This shall include the expected frequency of routine inspections and maintenance activities such as removal of sediment and waste concrete;
(ee) Name of receiving waters;
(i) Management practices or other controls to address the following:
(ii) Waste concrete management
(iii) Material delivery, handling and storage
(iv) Sanitary/septic waste management
(v) Solid waste/trash and debris management
(vi) Vehicle and equipment cleaning, fueling, and maintenance
(vii) Sensitive and vegetated area preservation
(viii) Pit and channel dewatering operations
(ix) Contaminated soil management as defined and approved by the Kentucky Divisions of Water and Waste Management.
(x) Pesticides, herbicides, and fertilizer use.
(xi) Long-term storm water quality treatment
(xii) Blowing of dust or sediment from the site
(xiii) Plan for stabilizing the entire site at the end of the construction season. If vegetation cannot be established, the site shall have a heavy mulch layer (straw or wood chips) applied to control erosion

(5.) The permittee shall notify the City in writing of any substantial field changes made to the approved Storm Water Quality Management Plan. Changes made to the Plan must be approved by the MS4 coordinator or their designee.

(6.) The City shall review the P-SWPPP within a reasonable time frame, typically thirty (30) calendar days from the date of submission and issue or deny the requested permit. Failure to do so will allow the Person to proceed with land-disturbing activities in accordance with BMPs and the submitted P-SWPPP. However, the City reserves the right to review and require changes it determines appropriate.

C. ***Exemptions for P-SWPPP Plan Requirements***

(1) Exemptions may be granted so long as erosion prevention and sediment control, water quality and cut-fill policies are adequately addressed. Exemptions may be granted for roads and utilities crossing waterways, and pedestrian trails and walkways proximate to waterways.

D. ***Private Ownership Responsibilities and Easement Requirements***

(1.) Any storm water management facility or BMP which services the following categories of property shall be privately owned:

(a) Single entity property

(b) Individual residential subdivisions in which the facility or BMP is within designated open areas or serves as an amenity with an established homeowners association

(c) Commercial and industrial development

(2.) A single entity shall be defined as an association, public or private corporation, partnership firm, trust, estate or any other legal entity allowed to own real estate including an individual lot owner. The terms for management of these properties shall be in writing, shall be recorded and shall, in addition to any other terms deemed necessary by the City, contain a provision permitting the City's inspection at any reasonable time of all facilities deemed critical to the public welfare. When a stormwater quality BMP serves more than one (1) parcel, a home or property owners' association or binding contract for the purpose of operation and maintenance is required.

(3.) The funding mechanism shall be in a form approved by the City. In the event that proposed funding is through an owner's association, then it must be demonstrated that the association may not dissolve unless long-term operation and maintenance activities are accepted by another entity with equivalent longevity and adequate funding. Furthermore, the owners association's responsibility must be stated in the association's declaration, covenants, or by-laws, as appropriate.

(4.) General routine maintenance (controlling vegetative growth and removing debris) shall be provided by the owner(s) of any stormwater management facility or BMP. The owner shall maintain a perpetual, non-exclusive easement that allows access for inspection and emergency maintenance by the City. The City has the right, but not the duty, to enter premises for emergency repairs.

E. Public Ownership and Regional Facilities Management

(1.) The objective of a regional stormwater management facility, pond or other device, is to address the stormwater management concerns in a given watershed with greater economy and efficiency than possible through individual facilities. The intended result is fewer stormwater management facilities to maintain in the affected watershed while sustaining efficiency.

(2.) All regional storm water management control facilities proposed by the owners, if approved and accepted by the City for dedication as a public regional facility, shall be publicly owned and/or maintained. All other stormwater management control facilities and BMPs shall be privately owned and/or maintained unless accepted for maintenance by the City.

(3.) The City may require dedication of privately owned stormwater facilities which discharge to the MS4. This shall be at the approval of the City Council.

F. Requirements for Long-Term Operation and Maintenance Agreements

(1.) Long-Term Operation and Maintenance Agreements shall include a maintenance plan for all stormwater quality BMPs in new development or redevelopment that require more than general maintenance (e.g. periodic mowing). These agreements are part of the P-SWPPP requirements. Agreements shall contain the following provisions:

(a) A plan developed to ensure that the stormwater quality BMPs are kept functional. The maintenance agreement will specify minimum operation and maintenance requirements and the frequency at which these activities are to be performed by the property owner.

(b) Schedules for inspections and techniques for operation and maintenance, including vegetation clearing or mowing and removing accumulated trash, debris, sediment pollutants and other forms of pollution

(c) Maintenance expectations for detention and retention facilities should be designed to require minimal maintenance

(d) Agreement shall be noted on the final plat with the appropriate notation on the particular lot(s)

(e) Agreement described herein shall be binding on the owner, its administrators, executors, assigns, heirs, and any other successors in interest

(f) Format for the Agreement shall be provided through example by the City, or through guidance documents

G. ***Maintenance Bonds for Post-Construction Facilities***

(1.) The City may require the posting of a maintenance bond to secure the structural integrity of said facilities as well as the functioning of said facilities in accordance with the approved P-SWPPP for a term of two (2) years from the date of acceptance of dedication. An irrevocable letter of credit can be used as the financial assurance in lieu of a maintenance bond although the contribution shall be equivalent to the amount that would be estimated for the maintenance bond. The maintenance bond shall be calculated as twenty percent (20%) of the estimated construction cost and may be reduced to ten percent (10%) after one year if there are no concerns by the MS4 representative or their designee. A qualified professional is to submit a construction cost estimate for the basis of the bond value.

H. ***As-built Requirements***

(1.) Prior to issuance of a Certificate of Occupancy, recording of the final plat or final release of bond, the as-built condition (including: invert elevations, size, shape, and location) of critical storm water management features must be identified, approved, and provided in a electronic form to the City Representative.

(2.) The volume, slopes, configuration, condition and topographic information of all detention, retention and water quality practices shall be certified by a Professional Engineer or Land Surveyor, as appropriate, licensed in the Commonwealth of Kentucky. This information shall be provided to the City, in the form of an as-built drawing or other electronic form accepted by the City. The as-built certification shall indicate if final conditions are consistent with, or exceed, the SWQMP provisions.

(3.) If it is determined that information provided in the as-built drawing, certification, inspection or survey of the site does not meet or exceed the SWQMP provisions, the City reserves the right to withhold Certification of Occupancy or final bond release. Furthermore, other enforcement mechanisms may be applied to the Permittee or persons making certifying statements.

(4.) The requirements of this subsection do not apply for individual residential lot development.

I. ***Qualified Professional Requirement***

(1.) A Qualified Professional is required to perform Construction and Post-Construction inspections and to direct and/or supervise maintenance activities

to ensure that the SWQMP Permit and Long-Term Operation and Maintenance Agreement provisions are being implemented properly.

(2.) Effect

(a) Section 10 Qualified Professional shall be effective and enforced on January 1, 2011.

(3.) Registration

(a) Qualified Professionals performing inspections or overseeing maintenance activities under this Ordinance must be registered by the City prior to execution of those actions. All applicants must file an application with the City.

(4.) Construction Qualified Professional Prerequisites

(a) Applicants must demonstrate knowledge and experience in the following areas:
(b) Construction practices
(c) Operational standards;
(d) Cause and failure indicators; and
(e) Maintenance measures used to prevent and correct failures.
(f) Applicants who can demonstrate one or more of the following will be considered for registration:
(g) Successful completion and passage of the Kentucky Erosion Prevention and Sediment Control course and examination through the University of Kentucky Transportation Center.
(h) Professional Engineer license in good standing in the Commonwealth of Kentucky with demonstrated experience in erosion prevention and sediment control on construction sites.
(i) Landscape Architect license in good standing in the Commonwealth of Kentucky with demonstrated experience in erosion prevention and sediment control on construction sites.
(j) Professional in Erosion and Sediment Control Certification in good standing.
(k) Similar qualification or certification of any other similar program in the Commonwealth of Kentucky or in the United States so long as that program required a test and the applicant passed the test.
(l) Documentation demonstrating the above will be required by the City before registration will be granted.

(5.) Post-Construction Qualified Professional Prerequisites

(a) Applicants must demonstrate knowledge and experience in the following areas:
(b) Storm water quality treatment practices;
(c) Operational standards;
(d) Cause and failure indicators; and
(e) Maintenance measures used to prevent and correct failures.

(f) Applicants who can demonstrate one or more of the following will be considered for registration:
(g) Professional Engineer license in good standing in the Commonwealth of Kentucky with demonstrated experience in storm water quality treatment BMPs.
(h) Landscape Architect license in good standing in the Commonwealth of Kentucky with demonstrated experience in storm water quality treatment BMPs.
(i) Professional in Storm Water Quality Certification in good standing.
(j) Similar qualification or certification of any other similar program in the Commonwealth of Kentucky or in the United States so long as that program required a test and the applicant passed the test.

(6) The City may report to the appropriate licensing, certification or qualification authority for activities not consistent with the policies and procedures identified in this ordinance. This may include reporting activities that include but are not limited to, the submittal of false or misleading information or for repeated incompetence or negligent actions by the registrant.

SECTION VI - ENFORCEMENT

A. Violations

(1.) The laws of the Commonwealth of Kentucky shall apply to this ordinance. This ordinance shall apply to all water entering the storm drain system generated on any developed and undeveloped lands within the jurisdiction of the City of Oak Grove unless explicitly exempted by an authorized enforcement agency. This ordinance is applicable to all new development and redevelopment activities resulting in the disturbance of 3,400 square feet or more of land including disturbance of less than 3,400 square feet if development is part of a larger common plan.

(2.) It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this ordinance. Any person who has violated or continues to violate the provisions of this ordinance may be subject to the enforcement actions outlined in this section or may be restrained by injunction or otherwise abated in a manner provided by law. The Storm City of Oak Grove shall have the authority to establish necessary administrative and certification procedures to insure the intent and purpose of this ordinance is carried out.

(3.) In the event the violation constitutes an immediate danger to public health, environment, or public safety, the City of Oak Grove is authorized to enter upon the subject's private property, without giving prior notice, to take any and all measures necessary to abate the violation and/or restore the property including

the issuance of immediate Stop Work Orders. The City of Oak Grove is authorized to seek costs of the abatement as described in this ordinance.

(4.) Failure to make an application for proposed improvements on a site or where the improvements as approved in the application are not installed shall result in a violation. The person, firm, or corporation determined to be in violation shall be fined not less than $100.00 per day or more than $200.00 per day for each violation and must take corrective action as required. After written notification from the City, the owner/developer shall have 10 days to comply with this ordinance, or appeal the order. Each day the improvement remains in violation past this time shall be deemed a separate offense.

B. Notice of Violation "NOV"

(1.) Whenever the City of Oak Grove finds that a violation of this ordinance has occurred, the City may order compliance first by verbal NOV, then by written NOV. The written NOV shall contain:

(a) The name and address of the alleged violator
(b) The address when available or a description of the building, structure or land upon which the violation is occurring, or has occurred
(c) A statement specifying the nature of the violation
(d) A description of the remedial measures necessary to restore compliance with this ordinance and a time schedule for the completion of such remedial action
(e) A statement of the penalty or penalties that shall or may be assessed against the person to whom the NOV is directed, and
(f) A statement that the determination of violation may be appealed to the City of Oak Grove's Property Maintenance Codes Enforcement Board by filing a written appeal within ten (10) days of service of NOV.

(2.) The NOV may require without limitation the following:

(a) The performance of monitoring, analyses and reporting
(a) The submittal of required reports and/or other documents
(b) The elimination of illicit discharges and illegal connections
(c) That violating discharges, practices or operations shall cease and desist
(d) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property
(e) Payment of costs to cover administrative and abatement expenses
(f) The implementation of pollution practices
(g) Other activities that serve to implement the provisions of this ordinance

(3.) The Permittee may request an extension to the NOV if they can prove the time allotted for remittance is not adequate.

C. *Appeal of Notice of Violation*

(1.) Any person receiving a NOV may appeal the determination of the violations. The notice of appeal must be received within ten (10) calendar days from the date of receipt of the NOV. Appeals shall be submitted to the City of Oak Grove's Property Maintenance Code Enforcement Board or its designee. Hearing on the appeal shall take place within ten (10) days from the date of receipt of the notice of appeal by the Board. The decision of the Board or its designee shall be final.

D. *Stop Work Order (SWO)*

(1.) If the violation has not been corrected pursuant to the time requirements set forth in the NOV, all construction activities other than those required to address deficiencies / violations shall be halted on a project site when a SWO has been issued.

(2.) The written SWO shall be sent by certified mail to the Permittee or may be hand delivered.

(3.) The written SWO shall specify deficiencies and violations that must be corrected prior to a City inspection for consideration of removing the SWO.

(4.) The Permittee shall notify the City in writing of the anticipated date for completion of the corrective action(s) and provide at least a two (2) calendar day notice for the City to perform a compliance inspection.

E. *Permit Suspension or Revocation*

(1.) In the event compliance cannot be achieved within the terms of a NOV and/or SWO, the City may proceed with permit suspension or revocation.

(2.) Land-disturbing activities are not allowed on a project site when a permit has been suspended or revoked other than those required to address deficiencies / violations.

(3.) The written Permit Suspension or Revocation shall be hand delivered and/or sent by certified mail to the Permittee.

(4.) A Permit Suspension requires that the Permittee submit a revised portion of SWQMP as indicated by the City for review and acceptance by the City of the specific issue of contention. When a Permit Suspension is removed, the City shall provide written notice to the Permittee.

(5.) When a Permit is revoked, the Permittee must reapply for a permit through the process of requesting a new Permit.

(6.) A Permit Revocation requires that the Permittee resubmit a SWQMP for a full review and acceptance by the MS4 coordinator or their designee

F. Abatement Costs

(1.) Within ten (10) calendar days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written appeal objecting to the assessment or to the amount of the assessment within ten (10) calendar days of such notice. The appeal shall be submitted to the City of Oak Grove's Property Maintenance Code Enforcement Board or its designee. If the amount due is not paid within ten (10) calendar days after receipt of the notice, or if an appeal is taken, within ten (10) calendar days after a decision on said appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount assessed.

(2.) Each subsequent but separate violation shall see a fine increase of 25% each violation.

(3.) The City of Oak Grove may recover attorney's fees, court costs and other expenses associated with enforcement of this ordinance, including sampling and monitoring expenses. Any person violating any of the provisions of this part shall become liable to the City of Oak Grove by reason of such violation.

G. Administrative Penalties

(1.) If work requiring a permit is started without securing the appropriate permit, the following administrative penalties will be assessed against the property owner:
Level 1 Land Disturbance - $50.00 – $500.00
Level 2 Land Disturbance - $100.00 - $500.00
Level 3 Land Disturbance - $150.00 - $500.00

A SWO shall be issued and enforced until the appropriate permit has been obtained.

H. Civil Penalties

(1.) In the event the alleged violator fails to take the remedial measures set forth in the *Notice of Violation* or otherwise fails to cure the violations described therein within ten (10) calendar days, or such greater period as the City of Oak Grove shall deem appropriate, the City may impose a penalty not to exceed $1,000.00 per day for each violation that remains unaddressed after receipt of appropriate enforcement action.

I. Criminal Penalties

(1.) For intentional or flagrant violations of this ordinance, the City of Oak Grove may issue a citation to the alleged violator requiring such person to appear in district court to answer charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed $500.00 per offense or imprisonment not to exceed sixty (60) calendar days, or both. Each act of violation and each day upon which any violation occurred shall constitute a separate offense.

J. Remedies Not Exclusive

(1.) The remedies listed in this section are not exclusive of any other remedies available under any applicable Federal, State or local law and the City of Oak Grove may seek cumulative remedies.

(2.) Any condition caused or permitted to exist in violation of any of the provisions of this ordinance as a threat to public health, safety, welfare and environment is declared and deemed a nuisance, and may be abated by injunctive or other equitable relief as provided by law.

SECTION VII - INDEMNIFICATION

The following indemnification statement shall be included on deed restrictions, applications, certifications, plans, and specifications. "The degree of flood protection required by this ordinance is considered reasonable for regulatory purpose and is based on sound scientific and engineering practices. Larger floods can and will occur on occasions. Flood heights may be increased by man – made or natural causes. This ordinance does not warrant, directly or indirectly, that areas outside the flood plain or land uses permitted within the flood plain, or storm drainage systems, will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Oak Grove, or any agencies or sub agencies, or any officer, or employee or agent thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made there under.

SECTION VII – ORDINANCE ADOPTION

A. Severability

(1.) The provisions and sections of this ordinance shall be deemed to be separable, and the invalidity of any portion of this ordinance shall not affect the validity of the remainder. If any section, provision or part of this ordinate shall be declared invalid by a court or competent jurisdiction, such declaration shall not affect the validity of this ordinance as a whole or any section, provision or part there of not declared invalid.

B. Reference of Storm Water Manual

(1.) Details concerning P-SWPPP design/performance criteria and acceptable design options shall be referenced from a City "Storm Water Manual" which shall be constantly updated without affecting this ordinance due to constantly changing technological advances in the field or empirical studies by the City yielding improved methods.

(2.) The MS4 representative or their designee shall retain the right to identify the contents of the manual as they so deem appropriate based upon their professional opinion. The MS4 representative may also refer to other manuals in used by comparable MS4s.

SECTION IX -- UNCONSTITUTIONALITY

Any and all existing ordinances inconsistent with this ordinance are hereby repealed. Should any part of this ordinance be void or unconstitutional, the remaining ordinance shall remain in full force and effect.

First Reading this 19th day of April, 2016.

Second Reading this 17th day of May, 2016.

APPROVED:

Bea Burt, Mayor
City of Oak Grove, Kentucky

ATTEST:

Theresa Jarvis, City Clerk
City of Oak Grove, Kentucky

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