

## **Appendix D**

### **Table of Contents**

**D1** - 2014 and 2015 BMP Status Reports

**D2** - Draft Ordinances

**D3** - Letter for Post Construction BMP Failure

# **D1 - 2014 and 2015 BMP Status Reports**





2015 BMP Status Report

Project Name	Project Address	Date of Approved Site Plan	Commercial Site	Site SWM Required	Site SWM Received	Site BMP Required	Site BMP Received	Owners Signature	Post BMP Required	# Of Control Facilities Constructed	Screening Required	Hydrodynamic Separator Required
McCracken County Banking Center	3390 Park Avenue	3/27/2015	x	x	x	x	x	x	1	1		
Paducah Ministry	2001 North 12th St	3/17/2015				x	x	x				
System Solutions Office Building	110 Carlisle Court	4/17/2015	x			x	x	x				
West Kentucky Garage Builders	1601 Bloom Avenue	3/17/2015	x					x				
Jeffery Alford	1701 Kentucky Avenue	3/27/2015	x					x				
Paducah Board of Education	800 Caldwell Street	4/15/2015						x				
Aldi	5156 Hinkleville Road	4/17/2015	x				x	x				
IMAC Office Building	2725 James Sanders Blvd	4/30/2015	x			x	x	x				
Daycare	2901 Ohio St	5/8/2015					x	x				
New Pain Management Center	67 Lakeview Dr	5/12/2015	x			x	x	x				
Chandler Park Apartments	2651 Perkins Creek Drive	7/1/2015				x	x	x				
Neuro Restorative of Kentucky	142 Stuart Nelson Park Road	6/18/2015	x					x				
**Greenway Village Phase II Revision	Trail Head Drive and Trail Loop	9/9/2015				x	x	x	1	1		
New Strawberry Hills Pharmacy	2670 New Holt Road	7/16/2015	x	x	x	x	x	x	1	1		
Labor Hall Local	1415 South 3rd St	8/18/2015					x	x				
**Greenway Village Site Plan Buildings 9,10,11	Trail Head Drive and Trail Loop	7/24/2015				x	x	x	1	1		
Tobacco Barn Addition	5023 Hinkleville Rd	8/14/2015	x					x				
Darling Ingredients	1350 N 10th St	8/14/2015	x					x				
Lourdes Hospital Clearing & Grading	1530 Lone Oak	8/18/2015				x	x	x				
Holiday Inn	600 N 4th St	9/22/2015	x			x	x	x				
Homewood Suites	3925 Coleman Crossing Circle	11/3/2015	x	x	x	x	x	x	1		x	1
**Greenwood Village Clubhouse & Pool Site Plan	3455 Trail Head Drive	12/15/2015				x	x	x	1	1		
F&F Leasing New Office and Warehouse	165 Main Street	11/3/2015	x			x	x	x				
Budget Inn Drainage Project	2701 HC Mathis Dr	11/3/2015	x					x				
Community Kitchen	1237 Martin Luther King Dr	11/18/2015						x				
BFW Addition	500 S 17th Street	11/30/2015	x					x				
Paducah Dome Location	North 6th St	11/30/2015		x	x	x	x	x	3			
Pain Management Center Mechanical Addition	2831 Lone Oak Rd	12/1/2015	x					x				
CSI Parking Lot Addition	3901 Technology Dr	12/11/2015	x	x	x	x	x	x	1			
Totals			18	5	5	15	19	29	10		5	1

\*Highlighted - Regional Detention  
 \*Highlighted - BMPs Installed in 2015  
 \*Highlighted - Not Constructed in 2015

\*\*Greenway Village Development drains to one central detention basin acting as a sediment basing throughout construction

## **D2 - Draft Ordinances**



**CITY OF PADUCAH  
ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE AMENDING CHAPTER 50,  
ARTICLE IV. "EROSION PREVENTION AND  
SEDIMENT CONTROL" OF THE CODE OF  
ORDINANCES OF THE CITY OF PADUCAH,  
KENTUCKY**

WHEREAS, this Ordinance amends Chapter 50, Article IV "Erosion Prevention and Sediment Control" of the *Code of Ordinances of the City of Paducah, Kentucky*; and

WHEREAS, this Ordinance is being enacted pursuant to mandates imposed by the Federal Clean Water Act (33 U.S.C. §1251 et seq. as may be amended) ("CWA"), the National Pollution Discharge Elimination System (33 U.S.C. §1342 as may be amended) ("NPDES"), and the Kentucky Pollutant Discharge Elimination System (401 KAR 5:050 to 401 KAR 5:080 as may be amended) in particular those parts that require local governments to comply with water pollution control requirements.

**NOW THEREFORE** be it ordained by the City Commission of the City of Paducah as follows:

**SECTION 1.** That Chapter 50, Article IV "Erosion Prevention and Sediment Control" is hereby amended and restated to read as follows:

**ARTICLE IV. EROSION PREVENTION AND SEDIMENT CONTROL**

**Sec. 50-171. Authority.**

This article is adopted pursuant to the powers granted and limitations by the Federal Clean Water Act (33 U.S.C. §1251 et seq. as may be amended) ("CWA"), the National Pollution Discharge Elimination System (33 U.S.C. §1342 as may be amended) ("NPDES"), and the Kentucky Pollutant Discharge Elimination System (401 KAR 5:050 to 401 KAR 5:080 as may be amended); and in particular those parts that authorize local governments to require any state or federal department or agency to comply with all local water pollution control requirements.

**Sec. 50-172. Purpose and scope.**

The regulations set forth in this article are intended to protect the general health, safety, and welfare of the citizens of Paducah, and more specifically;

- (1) To control soil erosion and sedimentation resulting from land-disturbing activities within the City;

(2) To establish guidelines, conservation practices and planning activities which minimize soil erosion and sedimentation;

(3) To comply with all applicable provisions of the Kentucky Pollutant Discharge Elimination System's (KPDES) Permit to Discharge from a Small Municipal Separate Storm Sewer System into Waters of the Commonwealth.

This article controls land disturbances, soil storage, and erosion and sedimentation resulting from such activities and establishes procedures for issuance, approval, administration, and enforcement of an Erosion Prevention and Sediment Control (EPSC) Permit.

**Sec. 50-173. Definitions.**

For the purposes of this article, the following terms, phrases, words, and their derivatives shall have the meaning stated below:

*2-year, 24-hour event* means mean the maximum 24-hour precipitation event with a probable recurrence interval of once in two (2), years, respectively, as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed there from.

*Applicant* is the person and/or landowner who submits an application to City for an EPSC Permit pursuant to this article. The applicant must be a person who has financial or operational control over the land-disturbing activity.

*As Soon As Practical* means at the earliest possible time when external factors such as inclement weather would not prevent completion of the task.

*Bankfull Elevation* means the water level, or stage, at which a stream, river, or lake is at the top of its banks and any further rise would result in water moving into the flood plain (NOAA Glossary).

*Bench* is a relatively level step excavated into earth material on which fill is to be placed.

*Best Management Practices or BMPs* means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the Commonwealth. BMPs also include treatment requirements, operating procedures, and practices to control stormwater runoff.

*Borrow* is earth material acquired from an off-site location for use in grading on a site.

*Clearing and grubbing* is the cutting and removal of trees, shrubs, bushes, windfalls and other vegetation including removal of stumps, roots, and other remains in the designated areas.

*Contractor* is a person who contracts with the permittee, landowner, developer, or another contractor (i.e. subcontractor) to undertake any or all the land disturbance activities covered by this article.

*Control Measure* refers to any BMP or other method used to prevent or reduce the discharge of pollutants to waters of the Commonwealth. (modified EPA CGP)

*Critical Areas* mean areas within 25 feet of, and on a positive slope toward a water of the Commonwealth.

*Detention facility* is a natural or manmade structure that provides for the temporary storage of stormwater runoff.

*Person* is any individual, firm, trust, corporation, company, organization, association, sole proprietorship, partnership, state agency, legal identity or political subdivision thereof engaged in a land disturbance activity.

*Engineer* is a professional engineer licensed in the Commonwealth of Kentucky to practice in the field of civil engineering.

*Erosion* is the wearing away of the ground surface as a result of the movement of wind, water, ice, and/or vehicles and equipment associated with land disturbance activities.

*EPSC (erosion prevention and sediment control)* is the prevention of soil erosion and control of solid material during land-disturbing activity to prevent its transport out of the disturbed area by means of air, water, gravity, or ice.

*EPSC Permit* is a permit required by this article for land disturbance activities. No land disturbing activities subject to the requirements of this article shall begin prior to the issuance of an EPSC Permit by the Issuing Authority.

*Equivalent Analysis Waiver* means a waiver, available only to “small construction activities” which discharge to non-impaired waters only, that is based on the applicant performance of an equivalent analysis using existing in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety.

*Existing grade* is the grade prior to land-disturbing activities.

*Final Stabilization* means that:

1. All soil disturbing activities at the site have been completed and either of the two following criterion are met:

a. a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or



b. equivalent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

2. For individual lots in residential construction, final stabilization means, that either:

a. The homebuilder has completed final stabilization as specified above, or

b. The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

3. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging area for highway construction, etc.) final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural uses. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to waters of the Commonwealth and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization criteria in item 1. (modified EPA CGP)

*Finish grade* is the final grade of the site which conforms to the approved plan.

*Floodplain* is the 100-year floodplain which is that area adjoining a watercourse which could be inundated by a flood that has a one percent chance of being equaled or exceeded in any given year and is delineated on the Federal Emergency Management Agency Floodway Maps.

*General permit* refers to the KPDES stormwater general permit for stormwater discharges associated with construction activities that disturb one acre or more. Coverage under this general stormwater permit is obtained by filing a Notice of Intent (NOI) with the Kentucky Division of Water.

*Grade* is the vertical location of the ground surface.

*High Quality Waters or HQW* means those “waters of the Commonwealth” that have been categorized by the Division of Water as high quality pursuant to the requirements of 401 KAR 10:030, Section 1(3).

*Impaired Waters or IW* means those “waters of the Commonwealth” that have been categorized by the Division of Water as impaired for applicable designated uses and have been identified pursuant to 33 U.S.C. 1315(b) and listed in the most recently approved 305(b) report.

*Issuing Authority* is the Paducah City Engineer's Office and its duly authorized designee.

*Land disturbance activity or Land disturbing activity* is any clearing, grubbing, grading, excavating, filling, or other alteration of the earth's surface where natural or manmade ground cover is destroyed. Land disturbance activity does not include the following:

- (1) Minor land disturbance activities including, but not limited to, activities specific to underground utility repairs, replacement of existing utilities, home gardens, minor repairs, and maintenance work.
- (2) Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
- (3) Emergency work to protect life, limb, or property and emergency repairs. If the land-disturbing activity would have required an approved EPSC permit except for the emergency, then the land area disturbed shall be shaped and stabilized in accordance with the requirements of this article.

*Larger common plan of development or sale* means a contiguous area where multiple separate and distinct construction activities are planned to occur at different times on different schedules under one plan, e.g., a housing development of 5 1/4-acre lots.

*Outfall* is the point of discharge to any watercourse from a public or private stormwater drainage system.

*Permittee* is the applicant in whose name a valid EPSC Permit is duly issued pursuant to this article and his/her/its agents, employees, and others acting under his/her/its direction.

*Rainfall Erosivity Factor or R Factor* means a measure of the erosive force and intensity of rain in a normal year. Two components of the factor are total energy and the maximum 30-min intensity of storms. The R-Factor is the sum of the product of these two components for all major storms in the area during an average year.

*Rainfall Erosivity Waiver* means a waiver, available only to “small construction activities”, that is based on the “rainfall erosivity” factor for the project.

*Retention facility* is a permanent natural or manmade structure that provides for the storage of stormwater runoff and includes of a permanent pool of water.

*Rough grade* is the stage at which the grade approximately conforms to the approved plan.

*Runoff* is rainfall, snowmelt, or irrigation water flowing over the ground surface.

*Sediment* is soils or other surficial materials transported by surface water or mechanical means as a product of erosion.

*Sedimentation* is the act or process of depositing sediment.

*Site* is the entire area of land on which the land disturbance activity is proposed in the EPSC Permit application.

*Site plan* is a plan or set of plans showing the details of any land disturbance activity of a site including but not limited to the construction of: structures, open and enclosed drainage facilities,

stormwater management facilities, parking lots, driveways, curbs, pavements, sidewalks, bike paths, recreational facilities, ground covers, plantings, and landscaping.

*Slope* is the incline of a ground surface expressed as a ratio of horizontal distance to vertical distance.

*Stormwater 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 (3) identifies procedures the operator will implement to comply with the terms and conditions of a construction general permit.

*Stripping* is any activity which removes or significantly disturbs the vegetative surface cover including clearing, grubbing of stumps and root mat, and topsoil removal.

*Structure* is anything manufactured, constructed or erected which is normally attached to or positioned on land, including buildings, portable structures, earthen structures, roads, parking lots, and paved storage areas.

*Topsoil* is the upper layer of soil.

*Total Maximum Daily Load or TMDL* means the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources and natural background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any non-point 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. (EPA CGP)

*TMDL Waiver* means a waiver, available only to “small construction activities”, based on an EPA established or approved TMDL.

*Utility* is the owner/operator of any underground facility including an underground line, facility, system, and its appurtenances used to produce, store, convey, transmit, or distribute communications, data, electricity, power, heat, gas, oil, petroleum products, potable water, stormwater, stream, sewage and other similar substances.

*Watercourse* is any natural or improved stream, river, creek, ditch, channel, canal, conduit, gutter, culvert, drain, gully, swale, or wash in which waters flow either continuously or intermittently.

*Water Quality Classification* means “waters of the Commonwealth” that have been classified by the Kentucky Division of Water in pursuant to the requirements of 401 KAR 10:030.

*Water or Waters of the Commonwealth* 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.

*Wetlands* is a lowland area such as a marsh, that is saturated with moisture, as defined by the United States Army Corps of Engineers.

**Sec. 50-174. Permits.**

(a) *Applicability.* An EPSC Permit from the Issuing Authority shall be required in the following circumstances:

(1) All land-disturbing activities including development and redevelopment activities that disturb an area greater than or equal to one acre. Sites that are smaller than one acre are also covered by this article if they are part of a larger common plan of development or sale as defined by this article.

(2) Land-disturbing activities of less than one acre that have the potential to negatively impact local water quality, sensitive areas, or result in a nuisance to the public. This determination will be made at the sole discretion of the City Engineer or his designee.

(b) *Exemptions.* The following activities are exempt from obtaining an EPSC Permit and from the requirements of this article:

(1) Cemetery graves.

(2) Emergencies posing an immediate danger to life or property, substantial flood or fire hazards.

(3) Land disturbance activity on lots less than one acre which are not located in or near a sensitive area.

(4) Land disturbance activity less than one acre that is not associated with a common plan of development, and is not located in or near a sensitive area.

(5) Agricultural operations required to adopt and implement an individual agriculture water quality plan pursuant to the requirements set forth in the Kentucky Agriculture Water Quality Act (KRS 224).

(6) Usual and customary site investigations, such as geotechnical explorations, monitoring wells and archaeological explorations, which are undertaken prior to submittal of an application for preliminary subdivision plat.

(7) The Issuing Authority may, on a project-by-project basis, exempt other land disturbance activities not specifically identified in this subsection (b).

(c) *EPSC Permit application.* Upon approval of the preliminary plat, or other applicable approvals from the local planning and zoning authorities, the person responsible for the land-disturbing activities subject to this article must submit a completed EPSC Permit application form along with an SWPPP to the Issuing Authority or the City Engineer for review and approval. A licensed engineer shall prepare the SWPPP. The Issuing Authority may waive the preparation or approval and signature by the licensed engineer when it is self-evident that the work is simple, clearly shown, and entails no hazard or nuisance potential to adjacent property or watercourse, and does not include the placement of fill upon which a structure may be erected.

(d) *Fiscal surety.*

(1) The permittee shall be responsible for the installation, good repair, day to day maintenance and ultimate removal of all temporary and permanent EPSC measures.

(2) The Issuing Authority may require the permittee to post a fiscal surety in the form of, cash, blanket bond, certified check, irrevocable letter of credit, or other instrument approved by the Issuing Authority. Fiscal surety for single-family developments may be exempt as determined by the Issuing Authority. When a fiscal surety is required, the surety shall be posted prior to the issuance of an EPSC Permit.

(3) The fiscal surety shall be in the amount equal to 125 percent of the estimated cost of the EPSC measures, as approved by the Issuing Authority. Whenever feasible, fiscal surety for the EPSC measures may be combined with and posted with other appropriate security instruments, such as those required for final plat approval or other building approvals.

(4) If the Issuing Authority finds the required temporary or permanent improvements or control measures have not been installed or maintained properly or are not in good repair or functioning properly, then the Issuing Authority may declare the permittee to be in default and enforcement actions initiated.

(5) Request for release of surety may be made after the Issuing Authority makes an inspection of the property and determines that site construction is finished; final stabilization has been established; the required improvements and controls are properly installed and temporary controls have been removed.

(e) *General permit.* Complying with the provisions of this article and issued EPSC Permit does not exempt the permittee from obtaining coverage from the Kentucky Division of Water under the KPDES stormwater general permit for storm discharges related to construction activities that disturb one acre or more. The permittee shall provide a copy of the Notice of Intent filed with the Kentucky Division of Water to the Issuing Authority prior to the issuance of an EPSC Permit by the Issuing Authority.

(f) *Relation to other laws.* Neither this article nor any administrative decision made under it exempts the permittee or any other person from procuring other required local, state, or federal permits or complying with the requirements and conditions of such other permit(s), or limits the right of any person to maintain, at any time, any appropriate action, at law or in equity, for relief

or damages against the permittee or any other person arising from the activity regulated by this article.

**Sec. 50-175. Review and approval.**

The Issuing Authority will review each application for an EPSC Permit to determine its conformance with the provisions of this article. After receiving a complete application and SWPPP, the Issuing Authority shall, in writing:

- (1) Approve the application and SWPPP and issue the EPSC Permit;
- (2) Approve the application and SWPPP subject to such reasonable conditions as may be necessary to secure substantially the objectives of this article, and issue the EPSC Permit subject to these conditions; or
- (3) Disapprove the permit application and SWPPP, indicating the reason(s) and procedure for submitting a revised application and/or submission.
- (4) Waive the permit application and SWPPP requirements, based on an approved “Equivalent Analysis Waiver”, “Rainfall Erosivity Waiver”, or “TMDL Waiver” by the Kentucky Division of Water submitted to the Issuing Authority.

**Sec. 50-176. Storm Water Pollution Prevention Plan (SWPPP).**

(a) Land disturbance activities, which involve the disturbance of soil as defined herein and described in subsection 50-174(a) above, require an SWPPP approved by the Issuing Authority. These plans shall be prepared by a licensed professional engineer, drawn to an appropriate scale and shall include sufficient information to evaluate the environmental characteristics of the affected areas, the potential impacts of the proposed grading on water resources, and show measures proposed to minimize soil erosion and off-site sedimentation. The permittee shall assure that all clearing, grading, drainage, construction, and development are performed in strict accordance with the approved plan and this article. The SWPPP shall include the following:

- (1) A site description in accordance with the most recent Kentucky General Permit for Stormwater Discharges Associated With Construction Activities.
- (2) Erosion prevention measures, sediment control measures, and other site management practices necessary to prevent the discharge of sediment and other pollutants into “waters of the Commonwealth” that are adequately protective to minimize receiving waters from being degraded and failing to support their designated uses.
- (3) A legible site map on 24” x 36” paper drawn to an engineer’s scale with a maximum of one inch equals forty feet in accordance with the most recent Kentucky General Permit for Stormwater Discharges Associated With Construction Activities. Multiple sheets may be used if site map requirements will not fit the minimum limits. All site map requirements of the most



recent Kentucky General Permit for Stormwater Discharges Associated With Construction Activities shall be depicted on the site map.

(4) The name, address, and telephone number of the owner and/or developer of the property where the land-disturbing activity is proposed.

(5) Ground contours, minimum two feet intervals, for the existing and proposed topography.

(6) The proposed grading or land disturbance activity including: the surface area involved, excess spoil material, use of borrow material, and specific limits of disturbance.

(7) A clear and definite delineation of any areas of vegetation or trees to be saved.

(8) A clear and definite delineation of any 100-year floodplain on or near the site.

(9) Existing and proposed storm drainage systems.

(10) Standard details for stormwater facilities and EPSC measures.

(11) Erosion and sediment control provisions to minimize on-site erosion and prevent off-site sedimentation, including provisions to preserve topsoil and limit disturbance.

(12) Design details for both temporary and permanent erosion control structures.

(13) Details of temporary and permanent stabilization measures.

(14) Measures to control, manage, store, maintain, and dispose of construction materials and construction and development site wastes and prevent or minimize discharges to surface waters and to avoid contamination of runoff to the maximum extent practicable.

(15) Any other EPSC measures, controls, or requirements that are identified in the most recent Kentucky General Permit for Stormwater Discharges Associated With Construction Activities.

(16) A signed statement on the permit by the permittee that any clearing, grading, construction, or development, or all of these, will be done pursuant to the approved SWPPP and this article.

(17) A signed statement on the SWPPP by the licensed professional engineer stating "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(b) The applicant may propose the use of any erosion protection and sediment control techniques in a final SWPPP, provided such techniques are proven to be as or more effective than the equivalent best management practices as contained in the Kentucky Erosion Prevention and Sediment Control Field Guide, Kentucky Best Management Practices Technical Manual, and the most recent Kentucky General Permit for Stormwater Discharges Associated With Construction Activities.

(c) *Additional Treatment And Monitoring May Be Required.* For land disturbing activities subject to the provisions of this Article, the City reserves the right to require superseding or additional treatment criteria, objectives, and/or monitoring for specific pollutant(s) as necessary to meet overall storm water quality management program objectives or directives under a watershed improvement or Total Maximum Daily Load (TMDL) program or KPDES/NPDES permit program as administered by the USEPA or Commonwealth of Kentucky.

**(Sec. 50-177. Design requirements.**

(a) The design, testing, installation, and maintenance of erosion protection and sediment control operations and facilities shall adhere to the criteria, standards and specifications as set forth in the most recent version of the Kentucky Erosion Prevention and Sediment Control Field Guide, Kentucky Best Management Practices Technical Manual, and the most recent Kentucky General Permit for Stormwater Discharges Associated With Construction Activities.

(b) At a minimum, the following requirements shall be met:

(1) Cut and fill slopes stabilized with standard vegetation shall be no greater than 3H:1V, unless approved by the Issuing Authority.

(2) Clearing and grading, except that necessary to establish sediment control devices, shall not commence until sediment control devices have been installed.

(3) Erosion control methods shall include the following:

a. Phasing of clearing and grading operations for all sites greater than 30 acres;

b. Soil stabilization by seeding/mulching within 15 days of mass grading operations for borrow (excavation) and fill areas;

c. Stabilizing soil stockpiles at the end of each workday;

d. Installing diversion ditches or other techniques where upland runoff can potentially flow across disturbed areas.

(4) Sediment control methods may include installing detention/retention facilities, sedimentation basins and traps, other similar facilities at the most downstream runoff location within the site.

(5) Waterway (creeks, ditches, etc.) protection shall include the installation of a temporary stream crossing; on-site stormwater drainage system and stabilized outlets at all pipes.

(6) Prevention of mud and debris onto public roadways by construction equipment and vehicles shall include the installation of crushed stone construction entrances.

(7) Maintenance schedule during and after construction of graded surfaces, EPSC facilities, and drainage structures.

(8) For High Quality Waters or Impaired Waters (Non-construction related impairment), a 25-foot minimum buffer zone shall be maintained between any disturbance and all edges of the receiving water as a means of providing adequate protection to the receiving waters. For sediment Impaired Waters with no TMDL a 50-foot minimum buffer zone shall be maintained. If the buffer zones cannot be maintained, an adequately alternative practices may be employed. The SWPPP shall explain any alternate practices and how these practices are adequately protective. Such cases include but are not limited to stream crossings and dredge and fill areas. In these cases the permittee shall minimize the disturbances in the buffer zones by using hand held or other low-impact equipment.

(9) EPSC measures and other site management practices shall be properly selected based on site-specific conditions, and installed and maintained to effectively minimize discharges from storm events up to and including a 2-year 24 hour storm event. The goal of these EPSC measures shall be to remove 80% of Total Suspended Solids that exceed predevelopment levels.

(10) All sites requiring an EPSC Permit shall be stabilized in accordance with the most recent Kentucky General Permit for Stormwater Discharges Associated With Construction Activities.

(11) Construction sites that discharge to High Quality Waters shall implement the following requirements:

- a. Installation of erosion prevention measures such as erosion control mats/blankets, mulch, or straw blown in and stabilized with tackifiers or by treading, etc. shall be implemented, in critical areas, on all disturbed areas within 24-hours or "as soon as practical" after completion of the disturbance/grading or following cessation of activities;
- b. Utilize retention basins constructed for the control of stormwater runoff from disturbed areas designed to hold a 2-year 24-hour storm;
- c. Ensuring that steps are taken to minimize any discharge of suspended or settleable solids from the site for storm events up to and including a 2-year 24-hour event.
- d. Maintaining a 25-foot buffer zone between any disturbance and the edge of the receiving water.
- e. Construction site discharges shall protect existing in-stream water uses and the level of water quality necessary to protect existing in-stream water uses consistent with the Kentucky General Permit For Stormwater Discharges Associated With Construction Activities.



**Sec. 50-178. Inspection.**

- (a) The Issuing Authority or its duly authorized representatives shall, as deemed necessary by the Issuing Authority, make inspections of land-disturbing activities subject to this article.
- (b) To ensure compliance with the approved EPSC Permit and to examine field practices to determine if control measures are adequate, authorized inspectors of the Issuing Authority shall have the power to inspect any land-disturbing activity and to review the records of all inspections, repairs and modifications made by the permittee.
- (c) The permittee shall notify the Issuing Authority 24 hours in advance of conducting initial land-disturbing activities.
- (d) Consistent with the requirements of the Kentucky Division of Water the permittee shall conduct inspections of the EPSC Controls and SWPPP Items and document the results of such inspections. Inspections shall be conducted in accordance with the most recent Kentucky Stormwater Construction Permit. Inspection reports shall be prepared for all inspections and shall be retained with the SWPPP. The SWPPP and inspection reports shall be made readily available to the Issuing Authority and Kentucky Division of Water as required by the most recent Kentucky General Permit For Stormwater Discharges Associated With Construction Activities. At a minimum the inspection report shall include the date, time of day, name of the person conducting the inspection, company represented, scope of the inspection, major observations relating to the SWPPP and BMPs installed, and required changes to the SWPPP, and shall contain all items required in the most recent Kentucky General Permit For Stormwater Discharges Associated With Construction Activities. The Issuing Authority has the right to make regular inspections to ensure the validity of the inspection reports.
- (e) The permittee shall be self-policing and shall correct or remedy any EPSC and or SWPPP measures that are not effective or functioning properly at all times during the various phases of construction. Failure of the permittee under this provision subjects the permittee and/or landowner to penalties under the enforcement provisions of this article.

**Sec. 50-179. Enforcement.**

- (a) The Issuing Authority shall be responsible for the enforcement of this article. A stop-work order may be posted for the entire project or any specified part thereof if any of the following conditions exist:
  - (1) Any land disturbance activity regulated under this article is being undertaken without a permit.
  - (2) The erosion and sediment control plan is not being fully implemented.
  - (3) Any of the conditions of the EPSC Permit are not being met.

(b) For the purposes of this section, a stop-work order is validly posted by posting a copy of the stop-work order on the site of the land-disturbing activity in reasonable proximity to a location where the land-disturbing activity is taking place. Additionally, a copy of the order, in the case of work for which there is an EPSC Permit, shall be mailed by first class mail, postage pre-paid, to the address listed by the permittee on the Permit.

(c) Once a stop work order has been issued, the permittee may not conduct land-disturbing activities until such time that the permittee has demonstrated full compliance with the approved SWPPP, and received written approval by the Issuing Authority.

(d) For land disturbance activities being conducted without a permit, the responsible parties shall immediately cease such activity upon being notified by the Issuing Authority. If the responsible party does not cease the land disturbance activity immediately, the Issuing Authority may request the city attorney to obtain injunctive relief.

(e) Ten calendar days after posting a stop-work order, the Issuing Authority may issue a Notice of Intent to the permittee, landowner, or land user of the Issuing Authority's intent to perform work necessary to bring the land disturbance activity into compliance with this article. The Issuing Authority may go on the land and commence work after three calendar days from issuing the Notice of Intent. The costs incurred by the Issuing Authority to perform this work shall be paid by the landowner or permittee out of the fiscal security referred to in this article, to the extent that the amount is covered thereby, with the remainder being directly due and owed by the landowner or permittee. In the event no EPSC Permit was issued or no bond was posted, the cost, plus interest at the rate authorized by the Issuing Authority, plus a reasonable administrative and attorneys fee shall be billed to the owner.

(f) Compliance with the provisions of this article may also be enforced by injunction.

(g) The Issuing Authority is authorized to require immediate abatement of any violation of this article that constitutes an immediate threat to the health, safety or well-being of the public. If any such violation is not abated immediately, the Issuing Authority is authorized to enter onto private or public property and to take any and all measures required to remediate the violation. Any expense related to such remediation undertaken by the Issuing Authority shall be fully reimbursed by the property owner and/or responsible party. If any expenses related to remediation are not reimbursed by the property owner and/or responsible party within ten days of notification by the Issuing Authority to these individuals, then the expenses shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. The Issuing Authority shall be entitled to recover from the property owner and/or responsible party all reasonable attorney fees and other costs of collection required in order to enforce the lien, if any, which secures the liability of the property owner and/or responsible party related to these remediation expenses.

(h) Any person, firm, corporation or agency acting as principal, agent, employee or otherwise, who fails to comply with the provisions of this article shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not less than \$100.00 per day and not more

than \$500.00 per day, or by imprisonment for not more than 90 days, or both, for each separate offense. Each day there is a violation of any part of this article shall constitute a separate offense.

(i) Should the Issuing Authority or city take legal action to enforce the provisions of this article, the Issuing Authority or city shall be entitled to collect any and all costs in instituting and taking such legal action, including but limited to its court costs and attorney's fees.

**SECTION 2. SEVERABILITY.** If any section, paragraph or provision of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this Ordinance.

**SECTION 3. COMPLIANCE WITH OPEN MEETINGS LAWS.** The City Commission hereby finds and determines that all formal actions relative to the adoption of this Ordinance were taken in an open meeting of this City Commission, and that all deliberations of this City Commission and of its committees, if any, which resulted in formal action, were in meetings open to the public, in full compliance with applicable legal requirements.

**SECTION 4. CONFLICTS.** All ordinances, resolutions, orders or parts thereof in conflict with the provisions of this Ordinance are, to the extent of such conflict, hereby repealed and the provisions of this Ordinance shall prevail and be given effect.

**SECTION 5. EFFECTIVE DATE.** This Ordinance shall be read on two separate days and will become effective upon summary publication pursuant to KRS Chapter 424.

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk

Introduced by the Board of Commissioners, \_\_\_\_\_, 2012

Adopted by the Board of Commissioners, \_\_\_\_\_, 2012

Recorded by City Clerk, \_\_\_\_\_, 2012

Published by *The Paducah Sun*, \_\_\_\_\_, 2012



**CITY OF PADUCAH  
ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE AMENDING CHAPTER 50,  
ARTICLE III. “STORMWATER  
CONVEYANCE AND MANAGEMENT” OF  
THE CODE OF ORDINANCES OF THE CITY  
OF PADUCAH, KENTUCKY**

WHEREAS, this Ordinance amends Chapter 50, Article III “Stormwater Conveyance and Management,” of the *Code of Ordinances of the City of Paducah, Kentucky*; and

WHEREAS, this Ordinance is being enacted pursuant to mandates imposed by the Federal Clean Water Act (33 U.S.C. §1251 et seq. as may be amended) (“CWA”), the National Pollution Discharge Elimination System (33 U.S.C. §1342 as may be amended) (“NPDES”), and the Kentucky Pollutant Discharge Elimination System (401 KAR 5:050 to 401 KAR 5:080 as may be amended) in particular those parts that require local governments to comply with water pollution control requirements.

**NOW THEREFORE** be it ordained by the City Commission of the City of Paducah as follows:

**SECTION 1.** That Chapter 50, Article III. “Stormwater Conveyance and Management,” is hereby amended and restated to read as follows

**ARTICLE III. STORMWATER CONVEYANCE, MANAGEMENT, AND QUALITY**

**Sec. 50-151. Purpose and scope of article.**

Proper stormwater management and good water quality are vital in promoting the health, safety and general welfare of the public. It is the intent of this article, in an effort to minimize the dangers of flooding to life, and property and to protect local water quality and maintain the integrity of stream channels, that certain runoff controls be provided as land areas are developed or redeveloped. The design criteria for stormwater conveyance and water quality structures are outlined in this article.

**Sec. 50-152. Definitions.**

For the purpose of this article, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

*80<sup>th</sup> Percentile Rainfall Event.* The rainfall event, based on historical rainfall records, that represents an event that is equal to or greater than 80 percent of the rainfall events that would be expected to occur in a typical year. Based on an analysis of precipitation records from 1971 to 2011, it has been determined that for the City of Paducah, this event produces a surface depth runoff of 0.7 inches.

*Best Management Practices or BMPs.* Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the Commonwealth. BMPs also include treatment requirements, operating procedures, and practices to control stormwater runoff.

*City plan review staff.* The City Engineer and/or other designated officials.

*Controlled release structure.* A facility constructed to regulate the volume of stormwater runoff that is conveyed during a specific length of time.

*Conveyance structures.* Water-carrying devices or improvements such as channels, ditches, storm sewers, culverts, inlets, and the like.

*Detention or retention.* Restraining the rate of stormwater runoff with some natural or manmade devices.

*Developed.* Conditions after construction or other manmade change to improved or unimproved land, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.

*Excess stormwater.* The calculated runoff produced under a natural or pre-developed condition versus the calculated runoff produced under an altered or post-developed condition, or that portion of stormwater runoff which exceeds the capacity of the storm sewers or natural drainage channels serving a specific watershed.

*Green Infrastructure.* 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 infiltrate, evapotranspire, 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.

*High Quality Waters or HQW.* Those “Waters of the Commonwealth” that have been categorized by the Kentucky Division of Water as high quality pursuant to the requirements of 401 KAR 10:030, Section 1(3).

*Impaired Waters or IW.* Those “Waters of the Commonwealth” that have been categorized by the Kentucky Division of Water as impaired for applicable designated uses and have been identified pursuant to 33 U.S.C. 1315 (b) and listed in the most recent 305 (b) report.

*Impervious surface.* Asphalt, concrete or any other surface which does not allow measurable infiltration of storm water.

*"Kentucky Pollutant Discharge Elimination System" or "KPDES"* means the Kentucky program for issuing, modifying, revoking and reissuing, revoking, monitoring and enforcing permits to discharge, and imposing and enforcing pretreatment requirements.

*KPDES SMS4 permit* means the general permit issued by the Kentucky Division of Water (KDOW) that authorizes small Municipal Separate Storm Sewer Systems (sMS4) to discharge stormwater runoff from a small Municipal Separate Storm Sewer System (MS4) to the receiving waters of the Commonwealth in accordance with effluent limitations, monitoring requirements, and other conditions set forth in the permit authorizing the MS4 to discharge under the Kentucky Pollutant Discharge Elimination System.

*Land disturbance activity or Land disturbing activity* is any clearing, grubbing, grading, excavating, filling, or other alteration of the earth's surface where natural or manmade ground cover is destroyed. Land disturbance activity does not include the following:

- (1) Minor land disturbance activities including, but not limited to, activities specific to underground utility repairs, replacement of existing utilities, home gardens, minor repairs, and maintenance work.
- (2) Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
- (3) Emergency work to protect life, limb, or property and emergency repairs.

*Larger common plan of development or sale* means a contiguous area where multiple separate and distinct construction activities are planned to occur at different times on different schedules under one plan, e.g., a housing development of 5 1/4-acre lots.

*MS4* is an acronym for a "municipal separate storm sewer system."

*Municipal Separate Storm Sewer System* 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 water, stormwater, or other wastes, that discharges to waters of the United States; i. designed or used for collecting or conveying stormwater;

ii. which is not a combined sewer; and

iii. which is not part of a Publically Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

*SMS4* is an acronym for a "small municipal separate storm sewer system."

*Natural drainage.* Water which flows by gravity in channels formed by the surface topography of the earth prior to changes made by the efforts of humans.



*NPDES* is an acronym for “National Pollutant Discharge Elimination System,” the effluent permitting program for point source discharges that is administered by the United States Environmental Protection Agency (USEPA).

*Off-site.* External to the boundary of a development.

*On-site.* Internal to the boundary of a development.

*Point discharge.* Release of stormwater at a specific location.

*Runoff.* Rainfall excess after natural losses from infiltration, evaporation, transportation or incidental pondage.

*Stormwater.* Stormwater runoff, snowmelt runoff, surface runoff and drainage.

*Stormwater runoff release rate.* The rate at which stormwater runoff is released from dominant to servient land.

*Stormwater storage area.* An area designed to temporarily accumulate excess stormwater.

*Swale.* Surface-type conveyance for stormwater, usually designated to carry incidental, localized runoff.

*TMDL.* Is an acronym for “Total Maximum Daily Load”, a federally mandated program for impaired waters of the Commonwealth to determine the maximum assimilative capacity of a water for a specified pollutant and to allocate allowable pollutant loads to sources in the watershed.

*Waters of the Commonwealth.* 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.

*Waters of the United States.* As defined by the Clean Water Act, applies only to surface waters, rivers, lakes, estuaries, coastal waters and wetlands. Not all surface waters are legally “Waters of the United States”. Generally those waters include the following:

- a. All interstate waters
- b. Intrastate waters used in interstate and/or foreign commerce
- c. Tributaries of the above
- d. Territorial seas at the cyclical high tide mark, and
- e. Wetlands adjacent to all of the above.

*Water-Quality Control Structure.* The structures (e.g. grass swales, filter strips, infiltration basins, detention ponds, stormwater wetlands, natural filtration areas, sand filters, and rain

gardens, etc.), used to slow runoff, promote infiltration, and reduce sediments and other pollutants in stormwater runoff.

*Water Quality Runoff Volume (WQv).* The storm water volume to be treated through a water quality control structure based on the surface runoff produced by an 80<sup>th</sup> percentile rainfall event.

**Sec. 50-153. Stormwater conveyance, management, and water quality facilities required.**

The requirements in this article shall apply to:

- (1) All land-disturbing activities and all development or redevelopment activities that disturb an area greater than or equal to one acre.
- (2) Sites that are smaller than one acre may also be covered by these regulations if they are a part of a larger common plan of development or sale.
- (3) Any nonresidential development for which the area paved and under roof is equal to or greater than 10,000 square feet.

These regulations shall apply to land-disturbing activities within the jurisdictional boundaries of the City of Paducah designated by the Kentucky Division of Water for coverage under the KPDES SMS4 permit.

Unless included in exemptions listed in section 50-155 or a waiver granted, all development occurring within the City and subject to this article shall provide for properly sized stormwater conveyance and water quality facilities and shall contain on-site, or provide off-site, stormwater management facilities capable of controlling peak discharge rates for selected design storms to at or less than pre-developed conditions, and water quality control structures capable of managing the storm water runoff quality produced from an 80<sup>th</sup> percentile rainfall event under post-construction conditions.

The use of other methods of controlling peak discharge rates and pollutant removal, such as bio-retention swales, infiltration ditches, hydrodynamic separators, and created wetlands may be required by the city, in its sole discretion, for new and redevelopment projects that are subject to the land development requirements of this article. Additionally, the city will promote conservation measures such as buffer strips and greenways as acceptable techniques toward the protection and improvement of local waterways.

**Sec. 50-154. Stormwater conveyance facilities and water quality control structures design criteria.**

The following criteria shall control when designing stormwater conveyance facilities and water quality control structures:

- (1) *Open channels and roadside ditches.* The design storm for the design of open channels and roadside ditches shall be a storm with a recurrence frequency of ten years. The time of concentration for open channel and roadside ditch design should be assumed to be 20 minutes.
- (2) *Storm sewers and inlets.* The design storm for the design of storm sewers and inlets shall be the five-year storm. Storm sewers and inlets shall be checked under ten-year storm loading

conditions for ponding limits. The ponding limit for streets with curb and gutter shall be an eight-foot spread measured from gutter to driving lane. Spread calculations shall be based upon an intensity of four inches per hour. Pipes should be sized based upon the actual time of concentration. The minimum time of concentration should be assumed to be eight minutes.

(3) *Entrance pipes and cross drains.* The design storm for the design of entrance pipes and cross drains shall be the ten-year storm. The duration of the design storm shall be assumed to be equal to the calculated time of concentration. The minimum time of concentration shall be assumed to be eight minutes. Entrance pipes and cross drains shall be checked under 25-year storm conditions to ensure against overtopping of roadways and flood damage to affected areas. Situations requiring pipes larger than 36 inches shall be designed using the culvert criteria in subsection (4) below.

(4) *Culverts.* The design storm for the calculation of runoff for culvert design shall be the 25-year storm. The duration of the design storm shall be assumed to be equal to the calculated time of concentration. The recommended check storm is the 100-year storm. The maximum headwater under 100-year storm conditions should not be allowed to overtop roads or increase the flooding potential in the affected areas.

(5) *Erosion control.* Plans for stormwater conveyance systems shall include the applicable provisions identified under Article IV, Erosion Prevention and Sediment Control, of this chapter.

(6) *Water Quality Control Structures.* The design rainfall event for the design of all storm water quality control structures shall be the surface depth of runoff produced from an 80<sup>th</sup> percentile precipitation event. Storm water quality control structures shall be designed, built, and maintained to treat, filter, flocculate, infiltrate, screen, evapo-transpire, harvest, and reuse stormwater runoff, or otherwise manage the stormwater runoff quality for the 80<sup>th</sup> percentile precipitation event. Green Infrastructure devices may be used as water quality control structures if it meets the design criteria.

(7) *Design certification.* Design of all stormwater conveyance and water quality facilities shall be prepared and stamped by a licensed professional engineer (Kentucky registration required). Design methods shall be in accordance with the Kentucky Department of Highways' Manual of Instructions for Drainage Design, latest edition and City of Paducah Design Standards.

#### **Sec. 50-155. Stormwater management and water quality facilities design criteria.**

As a **minimum**, the following criteria shall be followed when designing a stormwater management facilities and water quality control structures:

(1) *Design storm.* Stormwater management facilities shall be designed to retain the difference in the pre-development and post-development ten-year, 24-hour storm event. Stormwater management facilities that discharge to High Quality Waters shall be designed to retain the difference in the pre-development and post-development two-year, 24-hour storm event.



(2) *Emergency spillways.* Emergency spillways shall be designed to pass the 100-year storm. The effect of the 100-year storm must be considered and documented in the design of all stormwater management facilities.

(3) *Design calculations.* Design calculations submitted must include, but are not limited to, the following:

- a. Contributing drainage area, in acres. Indicate if pre-development and post-development areas differ.
- b. A breakdown of surface type for pre-development and post-development conditions (such as grassed, paved, roofed, and the like).
- c. Stage-storage curve for the proposed stormwater management facility.
- d. Stage-discharge curve for the outlet structure of the proposed stormwater management facility.
- e. Inflow and outflow hydrographs for pre-development and post-development conditions.
- f. Emergency spillway design calculations.
- g. Embankment design criteria as it relates to slope stability and compaction requirements during construction.

(4) *Gradient.* All detention basins having a vegetative cover shall be designed, constructed, and maintained equal to or greater than one percent throughout to the point of discharge.

(5) *Stormwater management and water quality plan.* The final stormwater management and water quality plan for the entire development shall include, but not be limited to, the following:

- a. All calculations, assumptions and criteria used in the design of the stormwater management facilities and water quality control structures.
- b. All plans and profiles of proposed storm sewers and open channels including horizontal and vertical controls, elevations, sizes, slopes and materials.
- c. Location, dimensions and design details required for the construction of all facilities.
- d. A description of the operation and maintenance needs for the stormwater management facilities and water quality control structures.
- e. All information relative to the design and operation of emergency spillways.
- f. Project specifications relative to erosion and sedimentation control.

- g. All deed restrictions, easements and rights-of-way.
- h. The ownership and maintenance responsibilities for all stormwater management and water quality control structures during and after development. The identity of the responsible individual, corporation, association or other specific entity and the specific maintenance activities and schedule must be outlined on the plan.
- i. Storm water management and water quality control devices shall be designed to minimize water quality impacts and shall attempt to maintain pre-development runoff conditions.
- j. Storm water quality management facilities shall be designed to effectively treat the required amount of water quality runoff volume for the developed site.

(6) *Exemptions.* Exemptions from the stormwater management requirements contained herein shall be granted to the following:

- a. Land-disturbing activities on property used for agricultural, horticultural or botanical production of plants and animals useful to man, including but not limited to: forages and sod crops, grains and feed crops, tobacco, cotton and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of these animals; bees; fur animals and aquaculture, except that the construction of a structure used for agricultural purposes of one or more acres, such as broiler houses, machine sheds, repair shops and other major buildings and which require the issuance of a building permit shall require the submittal and approval of a stormwater management plan prior to the start of the land-disturbing activity.
- b. Land-disturbing activities undertaken on forestland for the production and harvesting of timber and timber products.
- c. Minor land-disturbing activities such as residential gardens, individual residential or commercial landscaping, minor home repairs, or maintenance work, and construction or maintenance of individual underground utility connections.
- d. Activities undertaken by local governments or special purpose or public service districts relating to the emergency repair and maintenance of existing facilities and structures. These activities will be carried out using appropriate best management practices to minimize the impact on the environment and surrounding properties.
- e. Any nonresidential development for which the area paved and under roof is less than 10,000 square feet.
- f. Waivers may also be granted if, in other cases, the developer can provide sufficient documentation that the proposed development will not result in an adverse impact either upstream or downstream of the proposed site. Waivers shall be granted solely at the discretion of the City Engineer, based upon interpretation of the documentation presented by the developer in

conjunction with his or her knowledge of the relationship of the proposed development to the adjacent property.

(7) *Design certification.* Design of all stormwater management and conveyance facilities and water quality control structures shall be prepared and stamped by a licensed professional engineer (Kentucky registration required).

(8) *Construction certification.* Prior to final approval of the development, the licensed professional engineer must submit certification that the stormwater management and conveyance facilities were constructed in accordance with the approved plan. Final approval shall also provide evidence of the recording of all stormwater conveyance, management, and water quality facilities deed restrictions, easements and rights-of-way. Any request for deviation from the approved plan during construction shall be submitted to the City Engineer in writing for approval.

(9) *Ownership, operation and maintenance of stormwater control and water quality management facilities.* For all developments requiring stormwater control and water quality management facilities, ownership and maintenance responsibilities remain with the property owner/developer.

(10) *Additional Treatment And Monitoring May Be Required.* The City reserves the right to require for new and redeveloped properties superseding or additional treatment criteria or objectives for specific pollutant(s) as necessary to meet overall storm water quality management program objectives or directives under a watershed improvement or Total Maximum Daily Load (TMDL) program or KPDES/NPDES permit program as administered by the USEPA or Commonwealth of Kentucky.

(11) *Self Inspection Required.* The property owner shall provide self-inspection documentation for water quality management facilities. The City Engineer or his/her designee will periodically inspect water quality management facilities for the purpose of identifying maintenance and structural deficiencies and if required proof of monitoring. If additional treatment and or monitoring is required, the property owner shall be fully responsible for monitoring their storm water management and water quality facilities in accordance with the most recent directives under a watershed improvement or Total Maximum Daily Load Program or KPDES/NPDES permit program as administered by the USEPA or Commonwealth of Kentucky. In the event a deficiency is discovered a Notice of Violation will be issued and shall be enforced under City of Paducah Code of Ordinances Chapter 42 Article II.

(12) *In Lieu of Fee or Off Site Mitigation Program May Be Established.* The City of Paducah Engineering and Public Works may develop a payment-in-lieu program to allow property owners/developers make payment to the City in lieu of constructing storm water quality management structures. The in lieu of fee funds shall be applied to public storm water projects. Another option is to allow the property owner/developer to provide off site mitigation in the same watershed. Both of these options may be developed by the City of Paducah Engineering and Public Works Department following the permit requirements of the KPDES Permit For Small Municipal Separate Storm Sewer Systems.



**Sec. 50-156. Issuance of certificate of occupancy.**

No certificate of occupancy shall be issued for any development which is subject to the regulations of this article unless and until all requirements and criteria of this article are fully complied with.

**Sec. 50-157. Penalty.**

Any person, firm, corporation or agency acting as principal, agent, employee or otherwise, who fails to comply with the provisions of this article shall be guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine of not less than \$100.00 per day and not more than \$500.00 per day, or by imprisonment for not more than 90 days, or both, for each separate offense. Each day there is a violation of any part of this article shall constitute a separate offense.

**SECTION 2. SEVERABILITY.** If any section, paragraph or provision of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this Ordinance.

**SECTION 3. COMPLIANCE WITH OPEN MEETINGS LAWS.** The City Commission hereby finds and determines that all formal actions relative to the adoption of this Ordinance were taken in an open meeting of this City Commission, and that all deliberations of this City Commission and of its committees, if any, which resulted in formal action, were in meetings open to the public, in full compliance with applicable legal requirements.

**SECTION 4. CONFLICTS.** All ordinances, resolutions, orders or parts thereof in conflict with the provisions of this Ordinance are, to the extent of such conflict, hereby repealed and the provisions of this Ordinance shall prevail and be given effect.

**SECTION 5. EFFECTIVE DATE.** This Ordinance shall be read on two separate days and will become effective upon summary publication pursuant to KRS Chapter 424.

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MAYOR

ATTEST:

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City Clerk

Introduced by the Board of Commissioners, \_\_\_\_\_, 2012

Adopted by the Board of Commissioners, \_\_\_\_\_, 2012

Recorded by City Clerk, \_\_\_\_\_, 2012

Published by *The Paducah Sun*, \_\_\_\_\_, 2012

## **D3 – Letter for Post Construction BMP Failure**





CITY OF PADUCAH

300 South 5th Street  
P. O. Box 2267  
Paducah, KY 42002-2267  
www.paducahky.gov

Phone: (270) 444-8511  
Fax: (270) 444-8689

Rick Murphy, P.E.  
City Engineer  
July 27, 2015

Tasco Properties, LLC  
C/O Pace Development LLC  
1250 Bardstown Road #116  
Louisville, KY 40204

Re: Detention Basin Failure Located at 5194 Hinkleville Road

The City of Paducah Engineering & Public Works Department was notified of the detention basin spillway failure located at 5194 Hinkleville Road. The detention basin was designed to detain the difference in pre and post development flows for the 10 year 24 hour storm event while allowing the 100 year storm event to pass the emergency spillway. The City of Paducah Engineering & Public Works Department recognizes the basin was not sized for the event that the Paducah area experienced on July 7, 2015. However, the detention basin must be restored to its original design volume as approved by the Engineering & Public Works Department in order to meet City of Paducah Ordinance Chapter 50, Article III Stormwater Conveyance and Management. Section 50-155 Stormwater Management Facilities Design Criteria states,

*"As a minimum, the following criteria shall be followed when designing a stormwater management facility:*

- (1) Design storm. Stormwater management facilities shall be designed to retain the difference in the pre-development and post-development ten-year, 24-hour storm event.*
- (2) Emergency spillways. Emergency spillways shall be designed to pass the 100-year storm. The effect of the 100-year storm must be considered and documented in the design of all stormwater management facilities. "*

At this time, the detention basin for the development at 5194 Hinkleville Road does not meet aforementioned standards and is in violation of the City of Paducah Chapter 50, Article III Stormwater Conveyance and Management Ordinance. An Engineering & Public Works Department Representative will follow up with an on-site inspection in the next couple of weeks to ensure the detention basin has been re-stored to its original design volume.

Feel free to contact me for assistance should you have any questions.

Sincerely,

Eric Hickman, P.E.  
Storm Water and Drainage Engineer

C: Rick Murphy, City Engineer & Public Works Director  
5194 Hinkleville Rd File









City of Paducah  
 Engineering Public Works  
 PO Box 2267  
 Paducah, KY 42002-2267

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

*Tasco Properties, LLC  
 c/o Pace Development LLC  
 1250 Bardstown Road # 116  
 Louisville, KY 40204*

**COMPLETE THIS SECTION ON DELIVERY**

- A. Signature  Agent  Addressee
- B. Received by (Printed Name)  Date of Delivery
- C. Date of Delivery

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type

- Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number  
 (Transfer from service label)

7011 2970 0002 0108 7694

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-15-10

Tasco Properties, LLC  
 c/o Pace Development, LLC  
 1250 Bardstown Rd #116  
 Louisville, KY 40204

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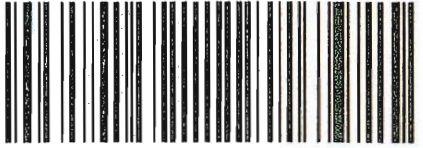
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Total Postage & Fees	\$

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