

## Storm Water Management Program

Ohio EPA MS4 Permit Number OHQ000003 2014-2019

December 2016 Update

**Butler County Storm Water District Storm Water Management Program** 

Prepared By:



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#### **Executive Summary**

The previous National Pollutant Discharge Elimination System (NPDES) permit for authorization for small Municipal Separate Storm Sewer Systems (MS4s) to discharge storm water (NPDES Permit No. OHQ000002) required the development and implementation of a Storm Water Management Program (SWMP) that satisfied the appropriate water quality requirements of Ohio Revised Code (ORC) 6111 and the Clean Water Act. The SWMP document is intended to identify and describe the best management practices (BMPs) selected by the Butler County Storm Water District to meet the requirements of the six minimum control measures (MCMs) described in the permit, why those BMPs were selected in light of local water quality issues, and performance standards for BMP implementation. The six MCMs are:

- 1. Public Education and Outreach on Storm Water Impacts
- 2. Public Participation / Involvement
- 3. Illicit Discharge Detection and Elimination
- 4. Construction Site Storm Water Runoff Control
- 5. Post-Construction Storm Water Management in New Development and Redevelopment
- 6. Pollution Prevention / Good Housekeeping for Municipal Operations

The NPDES small MS4 permit was reissued on September 11, 2014 (NPDES Permit No. OHQ000003), and requires MS4 communities which are renewing coverage under this permit to update their SWMP to be consistent with the permit and submit the updated SWMP to Ohio EPA for review. Permit No. OHQ000003 requires that where applicable, BMPs shall be selected to address EPA-approved Total Maximum Daily Load (TMDL) recommendations for identified water quality problems associated with MS4 discharges within the Butler County Storm Water District's watershed(s).



#### System Overview and Total Maximum Daily Loads (TMDLs)

The Butler County Storm Water District was formed in January 2003, and includes the following co-permittees:

- City of Trenton
- Fairfield Township
- Hanover Township
- Lemon Township
- Liberty Township
- Madison Township
- Ross Township

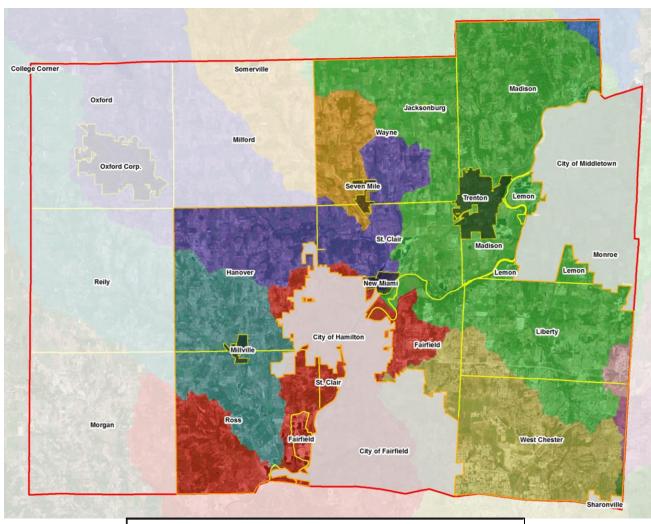
- St. Clair Township
- Wayne Township
- West Chester Township
- Village of Millville
- Village of New Miami
- Village of Seven Mile

The following map highlights the NPDES Phase II Municipal Separate Storm Sewer System (MS4) service area that falls under the jurisdiction of the Butler County Storm Water District and its co-permittees. The service area encompasses a total area of approximately 241 square miles.





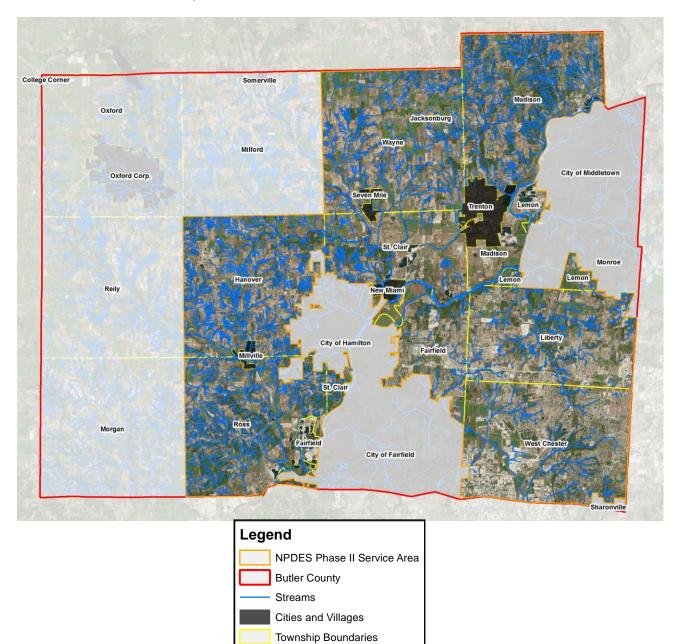
The Butler County Storm Water District Phase II MS4 service area overlaps with ten specific 10-digit hydrologic unit code (HUC-10) watersheds. The following map displays these watersheds within the Butler County Storm Water District Phase II MS4 service area.







The following map displays the stream systems within the Butler County Storm Water District Phase II MS4 service area. The Butler County Storm Water District has developed a comprehensive mapping database of the existing storm sewer system. The database includes catch basins, pipes, ditches, flood control facilities, post-construction water quality BMPs, storm water outfalls, and receiving streams.





Within Butler County, four watersheds are in various stages of development through the Ohio EPA's Total Maximum Daily Load (TMDL) program. Information on each of the watersheds and current TMDL status is described in the table below. Based on the stages of TMDL development for each of the watersheds below, the Butler County Storm Water District storm water management program will need to consider the nutrient TMDL goals and objectives that are described in the Ohio EPA approved Mill Creek watershed TMDL report.

Watershed	HUC 10	Status of TMDL	Pollutants for TMDL	Sources / Notes
Mill Creek	0509020301	Approved in April 2005	Nutrients, including dissolved nitrogen and total phosphorous	Municipal and other sewage treatment plants, combined and separate sewer overflows, urban runoff, landfills, land disposal, industrial point sources, construction, land development / suburbanization, on-site sewage systems, channel modification.
Twin Creek	0508000203	Approved in March 2010	Bacteria, sediment, and habitat	According to the TMDL report, Twin Creek below Tom's Run to the Great Miami River (portion of watershed within Butler County) is listed as having no impairment with no action needed.
Fourmile Creek	0508000206	TMDL report is in preparation.	Not yet published.	Fourmile Creek watershed assessment unit was assessed in 2005. According to OEPA, Sevenmile Creek is the only major tributary to Fourmile Creek. When studied by Ohio EPA in 2002, all of the biological sampling stations were fully meeting the state standards for aquatic life.
Great Miami River (Lower)	0508000207 (Dick's Creek) 0508000209 (Taylor Creek)	TMDL report is in preparation.	Not yet published, although nutrients listed as a special issue.	The Great Miami River (lower) watershed was studied during 2010. A final study plan was published by OEPA in May 2010.



#### **Organizational Chart**

The following organizational chart provides a visual representation of how the Butler County Storm Water District will accomplish the goals outlined in this Storm Water Management Program. Note that some individuals in elected positions (i.e. Township Administrator) are subject to change over the course of the permit term.





Public Education and Outreach



Construction Site Runoff Control



**Supplemental County Departments** 

Greg Wilkens **Butler County Engineer** 



MCM 2 Public Involvement / Participation



MCM 5 Post-Construction SW Management



Various Staff Members **HSTS Program** 



MCM 3 Illicit Discharge Program



Co-Permittees - Support All MCMs, provide Good Housekeeping

MCM 6 Good Housekeeping Program



Robert Leventry Director





BUTLER

Kelly Crout District Administrator



Fairfield Township Julie Vonderhaar



Township Administrator

Township Administrator

Hanover Township

Lemon Township Gary Morton

Road Superintedent

Bruce Henry



St. Clair Township Jerry Lanich Zoning Administrator



**Wayne Township** Daniel Hoit







Judith Boyke Township Administrator





**Liberty Township** Kristen Bitonte Township Administrator



City of Trenton Calvin Woodrey Mayor





Madison Township Todd Farler Township Administrator



**Ross Township** Robert Bass Township Administrator

Village of New Miami Patti Hanes Mayor

Village of Seven Mile Vivian Gorsuch Mayor

# Minimum Control Measure 1: Public Education and Outreach on Storm Water Impacts



## Minimum Control Measure 1: Public Education and Outreach on Storm Water Impacts

The Butler County Storm Water District MS4 permit requires public education and outreach efforts to do the following:

Shall implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

**Performance Standards:** Program shall include more than 1 mechanism and at least five different storm water themes or messages over the permit term, at least one theme shall be targeted to the development community, and reach at least 50% of the population.

The following tables outline the best management practices (BMPs) selected by the Butler County Storm Water District to accomplish MCM 1. The Butler County Storm Water District has the legal authority to implement all identified BMPs.

#### **BMP Type: Multi-Media Outreach**

Description of BMP: The Butler County Storm Water District will continue to partner with the Regional Storm Water Collaborative (<a href="www.savelocalwaters.org">www.savelocalwaters.org</a>) to provide a variety of multi-media communications to promote education and outreach of the storm water program and related issues. The Butler County Storm Water District is an active founding member of the Regional Storm Water Collaborative. Five storm water themes will be presented during the permit term, including: 1) Rain Barrels; 2) Household Conservation Practices; 3) Fertilizer and Nutrient Runoff Reduction; 4) Erosion and Sediment Control; and 5) General Storm Water Programs. See Appendix A of this SWMP document for a detailed summary of the proposed programs provided by the collaborative. The Erosion and Sediment Control theme will be targeted to the development community.

Measureable Goal	Schedule and Frequency	Responsible Party	Target Audience
Keep storm water information current on the Regional Storm Water Collaborative website (www.savelocalwaters.org).	Ongoing	Butler County Storm Water District	General Public
Document the number of social media posts on Facebook, Twitter, or other types of social media.	Annually	Butler County Storm Water District	General Public
Document the number of advertisement spots appearing on local television programs.	Annually	Butler County Storm Water District	General Public
Document the number of advertisement spots appearing on other avenues, such as billboards, radio, etc.	Annually	Butler County Storm Water District	General Public



**Rationale for BMP:** Multi-media communication is a growing way to provide current information to people in various media formats to reach a broad audience. The Regional Storm Water Collaborative utilizes mass media and shared resources in order to raise awareness of environmental quality issues in the Ohio River Valley. By leveraging joint resources, the Butler County Storm Water District's alliance with the Regional Storm Water Collaborative is capable of reaching audiences with a consistent message in the most economical and efficient manner possible.

**How BMP addresses TMDL:** One of the five target themes of the Regional Storm Water Collaborative is focused on fertilizer and nutrient runoff reduction, which supports the objectives of the Mill Creek TMDL for nutrient pollutant load reductions throughout the watershed.

#### **BMP Type: Sponsor Educational Storm Water Webcasts**

**Description of BMP:** The Butler County Storm Water District will annually sponsor or host an educational storm water webcast that is produced and presented by other agencies. Notification about opportunities to view the webcast for free at the Butler County Engineer's Office will be provided prior to the webcast.

Measureable Goal	Schedule and Frequency	Responsible Party	Target Audience
Host at least one educational storm water webcast and document the number of people in attendance during the webcast presentation.	Once per year during the permit term	Butler County Storm Water District	General Public, Engineering Community

**Rationale for BMP:** Providing an opportunity for others to view nationally-recognized speakers through the webcasts will result in educational opportunities on storm water management throughout the country.

**How BMP addresses TMDL:** The potential themes of the webcasts will be variable over the duration of the permit term, but can oftentimes be focused on strategies to implement storm water management techniques to enhance pollutant removal. The Butler County Storm Water District will seek a webcast, if available, that includes material on nutrient reduction activities that could be consistent with the objectives of the Mill Creek TMDL for nutrient pollutant load reductions.



#### **BMP Type: Education Program for Local Schools**

**Description of BMP:** The Butler Soil and Water Conservation District will continue to conduct education programs for local schools throughout the MS4 service area within Butler County. The Butler Soil and Water Conservation District offers programs and resources to local schools and groups.

Measureable Goal	Schedule and Frequency	Responsible Party	Target Audience
Document the number of classroom education programs or presentations, and document the number of students and adults reached in the program.	Annually	Butler Soil and Water Conservation District	Students

**Rationale for BMP:** Providing education and outreach in local schools can reach a large volume of students of all ages, and can help to influence the next generation about the importance of water quality in our local communities.

**How BMP addresses TMDL:** Educating students about issues related to storm water can ultimately help improve water quality for future generations. Although the education program for local schools is not tailored around the impacts of nutrients, educational programs that include information about how pollutants impact local waterways is consistent with the objectives of the Mill Creek TMDL.

#### **MCM 1 Decision Process – Rationale Statement**

The rationale statement shall include the following information, at a minimum:

i. How you will inform individuals and households about the steps they can take to reduce storm water pollution?

Refer to the tables above for a description of the BMPs that Butler County Storm Water District intends to implement to inform the public about storm water runoff pollution and ways to reduce pollution and improve water quality. For example, the multi-media outreach BMP will include several themes that are intended to inform households about the steps they can take to reduce storm water pollution, including information about rain barrels, household conservation practices, and fertilizer and nutrient runoff reduction. Appendix A includes a detailed summary of the storm education and awareness programs target the public / property owners.

ii. How you plan to inform individuals and groups on how to become involved in the storm water program (with activities such as local stream restoration activities).

Facebook posts, website updates, and other multi-media outreach methods are all means that will be used to notify individuals about upcoming opportunities to get involved in the storm water program.

iii. Who are the target audiences for your education program who are likely to have significant storm water impacts (including commercial, industrial and institutional entities) and why those target audiences were selected?



Refer to the table above for a description of the target audiences. The target audiences generally include the public / property owners, engineering community, development community, and local students. These audiences were selected because they represent a broad base of groups that could implement practices to improve water quality throughout the community.

iv. What are the target pollutant sources your public education program is designed to address?

Because the Mill Creek has an approved TMDL that emphasizes water quality impacts associated with nutrients, specific themes will be highlighted to educate the public about how nutrients can impact local streams. Information about other pollutants will be included during the permit term as well, such as sediments and household hazards or illicit discharges.

v. What is your outreach strategy, including the mechanisms (e.g., printed brochures, newspapers, media, workshops, etc.) you will use to reach your target audiences, and how many people do you expect to reach by your outreach strategy over the permit term.

Refer to the tables above for detailed outreach strategies that are intended to reach the public through multi-media outlets, storm water webcasts, and education programs for local schools. Based on the broad-scale nature of advertisement spots appearing on local television, radio, social media, billboards and other mechanisms, the Butler County Storm Water District anticipates these outreach strategies will reach well beyond 50 percent of the population within its service area during the permit term. Appendix A includes a detailed summary of the outreach program to be implemented by the Regional Storm Water Collaborative in partnership with the Butler County Storm Water District.

vi. Who (person or department) is responsible for overall management and implementation of your storm water public education and outreach program and, if different, who is responsible for each of the BMPs identified for this program.

Refer to the tables above for the responsible party for each BMP included in the program. Generally, this responsibility is shared between the Butler County Storm Water District, Butler Soil and Water Conservation District, and the Regional Storm Water Collaborative. These parties work in tandem to ensure that public education and outreach programs are implemented throughout the MS4 service area.

vii. How will you evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs?

The measureable goals were selected to be specific, measureable, achievable and realistic. The Butler County Storm Water District intends to evaluate the effectiveness of the public education and outreach BMPs by tracking and documenting information as described in the measureable goals in the tables above. Adjustments will be made in the future if the Butler County Storm Water District determines that any of the BMPs are not effectively promoting public education and outreach in the storm water program.



## Minimum Control Measure 2: Public Involvement/Participation



## Minimum Control Measure 2: Public Involvement/Participation

The Butler County Storm Water District MS4 permit requires the public involvement/participation efforts to do the following:

Shall comply with State and local public notice requirements and satisfy this minimum control measure's minimum performance standards when implementing a public involvement/participation program.

**Performance Standards:** Include, at a minimum, five public involvement activities over the permit term.

The following tables outline the best management practices (BMPs) selected by the Butler County Storm Water District to accomplish MCM 2. The Butler County Storm Water District has the legal authority to implement all identified BMPs. At least five public involvement activities will be implemented over the permit term.

#### **BMP Type: Stream Clean-Ups**

**Description of BMP:** The Butler County Storm Water District will collaborate with other local partners to facilitate and implement at least one stream clean-up event annually. The stream clean-up event will be advertised through multi-media outreach activities at a minimum to target the public and encourage public involvement / participation.

Measureable Goal	Schedule and Frequency	Responsible Party	Target Audience
Facilitate and implement at least one stream clean-up event annually, and document the number of participants at each stream clean-up event.	One stream clean- up per year during the permit term.	Butler County Storm Water District	General Public

**Rationale for BMP:** Engaging the public in stream clean-up activities provides an opportunity for hands-on involvement and participation while also improving water quality through cleaning the streams.

**How BMP addresses TMDL:** Stream clean-ups will provide a benefit of water quality improvement in the Mill Creek watershed, although the specific benefit of nutrient reduction would be challenging to quantify. Public involvement / participation in these types of activities is consistent with the objectives of improving water quality as required through the Mill Creek TMDL.



#### **BMP Type: Storm Drain Labeling**

**Description of BMP:** The Butler County Storm Water District will continue to purchase and coordinate the installation of storm drain labels where needed. Neighborhood volunteers will be utilized to install storm drain labels and to distribute information to residential properties on hazards of illicit discharges. Through previous efforts by the Butler County Storm Water District, the majority of storm drains within the Phase II MS4 service area have already been labeled in recent years, but some require periodic replacement due to deterioration.

Measureable Goal	Schedule and Frequency	Responsible Party	Target Audience
Document the number of storm drains labeled annually, and document the number of neighborhood volunteers who assist with the storm drain labels.	Annually	Butler County Storm Water District	Homeowners and General Public

**Rationale for BMP:** Engaging the public in storm drain labeling activities provides an opportunity for hands-on involvement and participation, while also providing public education and awareness about how illicit discharges into storm drains result in water quality issues of local streams.

**How BMP addresses TMDL:** Storm drain labeling does not have any specific ties to nutrient load reductions. However, public involvement / participation in these types of activities is consistent with the objectives of improving water quality as required through the Mill Creek TMDL.

#### **BMP Type: Rain Barrel Art Project**

**Description of BMP:** In partnership with the Regional Storm Water Collaborative, the Butler County Storm Water District supports the rain barrel art project, which promotes public involvement through the creation of art by painting rain barrels. The program invites local artists of all levels to paint 50 rain barrels every year, which are then displayed for a period of several weeks (typically at the Cincinnati Zoo). During this display time, thousands of people interact with and view the rain barrels. The project also raises money by auctioning the rain barrels off at a public event, and homeowners who purchase the rain barrels ultimately install them to capture rooftop runoff.

Measureable Goal	Schedule and Frequency	Responsible Party	Target Audience
Document the number of rain		Butler County Sterm	
barrels painted and the number of	Annually	Butler County Storm Water District	General Public
people participating in the auction.		vvater District	

**Rationale for BMP:** Engaging the public in the rain barrel program raises awareness of rain barrel use and the environmental benefits of sustainable storm water management.

**How BMP addresses TMDL:** Rain barrels capture a small amount of rooftop runoff for reuse, which could slightly reduce the runoff volume and corresponding nutrient pollutant load from residential properties.



#### BMP Type: Storm Water Hotline, Database, and Response Program

**Description of BMP:** The Butler County Storm Water District will continue to implement a storm water hotline that is made available to the public for notification of citizen inquiries or complaints. The Butler County Storm Water District will also continue implementing a database and response program to track information specific to the customer's address, method of contact, nature of inquiry, and detail of inquiry / complaint resolution.

Measureable Goal	Schedule and Frequency	Responsible Party	Target Audience
Document the number of citizen inquiries / complaints received through the storm water hotline, and maintain database to document each response.	Annually	Butler County Storm Water District	General Public

**Rationale for BMP:** Allowing the public to be involved through the storm water hotline gives citizens an avenue to voice any storm water management quantity or quality complaints. This type of public participation mechanism can be extremely useful for the purposes of illicit discharge detection. **How BMP addresses TMDL:** Public involvement through the storm water hotline is not anticipated to have a direct link to the nutrient pollutant load reduction objectives of the Mill Creek TMDL.

#### MCM 2 Decision Process – Rationale Statement

The rationale statement shall include the following information, at a minimum:

i. Have you involved the public in the development and submittal of your NOI and SWMP description?

A draft of this storm water management program document was posted on the Butler County Storm Water District's website for public review and comment.

ii. What is your plan to actively involve the public in the development and implementation of your program?

A draft of this storm water management program document was posted on the Butler County Storm Water District's website for public review and comment. Refer to the tables above for a description of the BMPs the Butler County Storm Water District intends to implement to encourage public involvement and participation for water quality improvement. These BMPs include stream clean-ups, storm drain labeling, rain barrel art project, and the storm water hotline, database, and response program, all of which promote public involvement and participation the storm water program. The proposed SWMP includes various opportunities for the public to get involved in the implementation of the SWMP.

iii. Who are the target audiences for your public involvement program, including a description of the types of ethnic and economic groups engaged? You are encouraged to actively involve all potentially affected stakeholder groups, including



commercial and industrial businesses, trade associations, environmental groups, homeowner's associations, and educational organizations, among others.

Refer to the tables above for a description of the target audiences, which are focused on homeowners, volunteer groups, and the general public. Generally, these BMPs are targeted more toward residents, but County employees and businesses will be encouraged to participate in public involvement activities, such as stream clean-up events.

iv. What are the types of public involvement activities included in your program? Where appropriate, consider the following types of public involvement activities: citizen representatives on a storm water management panel, public hearings, working with citizen volunteers willing to educate others about the program, volunteer monitoring or stream/beach clean-up activities.

Refer to the table above for a description of the public involvement activities included in the program. The BMPs include stream clean-ups, storm drain labeling, rain barrel art project, and the storm water hotline, database, and response program, all of which promote public involvement and participation the storm water program.

v. Who (person or department) is responsible for the overall management and implementation of your storm water public involvement/participation program and, if different, who is responsible for each of the BMPs identified for this program.

Refer to the tables above for the responsible party for each BMP included in the program. Generally, the Butler County Storm Water District is responsible for the implementation of the public involvement/participation MCM.

vi. How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

The measureable goals were selected to be specific, measurable, achievable and realistic. The Butler County Storm Water District intends to evaluate the effectiveness of the public involvement/participation BMPs by tracking and documenting information as described in the tables above. Adjustments will be made in the future if the Butler County Storm Water District determines that any of the BMPs are not effectively promoting public involvement / participation in the storm water program.



### Minimum Control Measure 3: Illicit Discharge Detection and Elimination



#### Minimum Control Measure 3: Illicit Discharge Detection and Elimination

The Butler County Storm Water District MS4 permit requires the illicit discharge detection and elimination efforts to do the following:

Shall develop, implement and enforce a program to detect and eliminate illicit discharges.

Shall develop a comprehensive storm water system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls; MS4 system (catch basins, pipes, ditches, detention/retention ponds, post construction water quality BMPs), and private water quality BMPs.

Shall submit to EPA a list of HSTSs including addresses; a map of HSTS's including type and size of conduits that receive discharges.

Shall effectively prohibit through ordinance, or other regulatory mechanism, illicit discharges including enforcement procedures.

Shall development and implement a plan to detect and eliminate non-storm water discharges, including illegal dumping and HSTS. At a minimum this includes:

- i. Working with applicable agencies and/or departments to identify HSTS's that could be connected to central sewers, and require connection for any HSTS not operating properly.
- ii. Working with the health department to develop a proactive O&M program.
- iii. Actively investigating contamination sources during dry weather screening.
- iv. Evaluating the planned/possible installation of sewers in areas with high densities of HSTS's.

Shall informs public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

Shall address the following categories of non-storm water discharges or flows if identified as significant contributors of pollutants: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, and discharges or flows from firefighting activities.

**Performance Standards:** Initial dry weather screening of all storm water outfalls over the permit term. Establish priorities and goals for long-term system wide surveillance of MS4. System map shall be updated as needed.



The following tables outline the best management practices (BMPs) selected by the Butler County Storm Water District to accomplish MCM 3. The Butler County Storm Water District has the legal authority to implement all identified BMPs.

#### BMP: Illicit Discharge Detection and Elimination Regulation

**Description of BMP:** The Butler County Storm Water District has already developed and adopted an illicit discharge detection and elimination regulation (Resolution No. 09-11-1954). This regulation will continue to be the mechanism for enforcing the elimination of any illicit discharges that are detected within the MS4 service area. The regulation establishes the authority and means by which the Butler County Storm Water District will carry out inspection, monitoring and enforcement procedures necessary to ensure compliance. See Appendix B of this SWMP document for a copy of the District's Illicit Discharge Detection and Elimination regulations.

Measureable Goal	Schedule and Frequency	Responsible Party
Maintain the existing regulations prohibiting illicit discharges, and document the type and frequency of any enforcement activities that are implemented as established by the illicit discharge detection and elimination regulations.	Annually	Butler County Storm Water District

**Rationale for BMP:** Continuing to maintain and utilize the illicit discharge detection and elimination regulation provides the Butler County Storm Water District with an appropriate mechanism to enforce the prohibition of illicit discharges to the MS4 service area.

**How BMP addresses TMDL:** Prohibiting illicit discharges will improve water quality, however this will not directly impact the nutrient loadings in the Mill Creek TMDL.

#### **BMP: Storm Sewer System Mapping**

**Description of BMP:** The Butler County Storm Water District has already developed a comprehensive mapping database of the existing storm sewer system. The database includes catch basins, pipes, ditches, flood control facilities, post-construction water quality BMPs, storm water outfalls, and receiving streams. The Butler County Storm Water District intends to continue updating the map as necessary to include any new storm sewer system data from new development or redevelopment projects.

Measureable Goal	Schedule and Frequency	Responsible Party
Document any new information added to the storm sewer system mapping database.	Annually	Butler County Storm Water District

**Rationale for BMP:** Updating the storm system mapping with information on future development and redevelopment projects will continue to provide the Butler County Storm Water District with a detailed database of the storm sewer system mapping information.

**How BMP addresses TMDL:** No direct link to nutrient reduction goals of the Mill Creek TMDL, but having an accurate map can be beneficial in the future if nutrient loadings need to be estimated.



#### **BMP: Dry-Weather Screening of Storm Water Outfalls**

**Description of BMP:** The Butler County Storm Water District will conduct dry-weather screening of all known publicly-owned storm water outfalls within the MS4 service area at least once during the permit term. All of the publicly-owned outfalls have been identified and mapped, for an estimated 571 outfalls at this point in time. The Butler County Storm Water District utilizes standard operating procedures for dry-weather screening of outfalls, including an outfall identification guideline and a field investigation guideline. The Butler County Storm Water District has budgeted for 20 percent of the outfalls to be screened annually to ensure that all of the outfalls are screened at least once during the permit term.

Measureable Goal	Schedule and Frequency	Responsible Party
Track the location and number of outfalls screened for illicit discharges during dry	All outfalls will be screened at least once during the	Butler County Storm Water District
weather.	permit term.	water district

**Rationale for BMP:** Screening storm water outfalls will assist the Butler County Storm Water District in identifying illicit discharges throughout the storm sewer system.

**How BMP addresses TMDL:** Dry-weather screening of outfalls for illicit discharges will ultimately improve water quality once resolved, however this will not directly impact the nutrient loadings in the Mill Creek TMDL.

#### **BMP: HSTS Mapping and Coordination**

**Description of BMP:** The Butler County Storm Water District has previously researched archived home sewage treatment system (HSTS) records held by the Butler County Health Department and added available information to the storm sewer system mapping database. Any new applications for HSTS in the future will be added to the mapping database. The County has developed a 208 plan which includes an evaluation of sanitary sewer service in high HSTS areas. Coordination on this effort between multiple partner agencies will continue in future years to assess the feasibility of future sewer service.

Measureable Goal	Schedule and Frequency	Responsible Party
Document any new or updated HSTS information that is added to the storm sewer	Annually	Butler County Storm Water District
system mapping database.		Butler County Health
		Department

**Rationale for BMP:** Updating the storm system mapping with new HSTS information will continue to provide the Butler County Storm Water District with a detailed database of the location of HSTSs, which will be useful for future planning purposes.

**How BMP addresses TMDL:** No direct link to nutrient reduction goals of the Mill Creek TMDL, but having an accurate map of HSTS locations can be beneficial to identify clusters of where illicit discharges could be more likely to occur.



#### **BMP: Illicit Discharge Detection and Elimination Database**

**Description of BMP:** The Butler County Storm Water District has created a database and response program to document and accurately record contact information regarding spill reports, illicit discharges, illegal dumping, and citizen complaints. The information obtained from the storm water hotline (BMP previously described in MCM 2) and database is stored in District records and can be used to map hotspots. Problem areas can be viewed graphically based on type, location, and frequency. The database is updated on a regular basis to help identify and resolve problem areas.

Measureable Goal	Schedule and Frequency	Responsible Party
Document the number of citizen inquiries /	Annually	
complaints received through the storm water		Butler County Storm
hotline, and maintain database to document		Water District
each response.		

**Rationale for BMP:** Maintaining and updating the illicit discharge detection and elimination database allows the Butler County Storm Water District to identify problem areas and to resolve issues related to illicit discharges and other citizen complaints. This type of BMP can be extremely useful for the purposes of illicit discharge detection.

**How BMP addresses TMDL:** The illicit discharge detection and elimination database is not anticipated to have a direct link to the nutrient pollutant load reduction objectives of the Mill Creek TMDL.

#### MCM 3 Decision Process – Rationale Statement

The rationale statement shall include the following information, at a minimum:

i. How you will develop a comprehensive storm sewer map showing the location of all outfalls and the names and location of all receiving waters. Describe the sources of information you used for the maps, and how you plan to verify the outfall locations with field surveys. If already completed, describe how you developed this map.

Also, describe how your map will be regularly updated.

The Butler County Storm Water District has already developed a comprehensive mapping database of the existing storm sewer system. The database includes catch basins, pipes, ditches, flood control facilities, post-construction water quality BMPs, storm water outfalls, and receiving streams. The map was developed based on a combination of comprehensive field data collection and the integration of information from record drawings from new development and redevelopment projects. The Butler County Storm Water District intends to continue updating the map as necessary to include any new storm sewer system data from new development or redevelopment projects. The Butler County Storm Water District will continue to utilize its own staff and resources to keep GIS shapefiles updated in the storm sewer system mapping database as changes are needed.

ii. The mechanism (ordinance or other regulatory mechanism) you will use to effectively prohibit illicit discharges into the MS4 and why you chose that mechanism. If you need to develop this mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.

The Butler County Storm Water District will continue implementing its illicit discharge



detection and elimination program to eliminate illicit discharges within the storm sewer system. The District has already developed and implemented an illicit discharge and elimination regulation (Resolution No. 09-11-1954). The District chose to use the regulations as its mechanism to enforce the illicit discharge program because it allows the District to take action when needed to eliminate illicit discharges and to submit an invoice to the owner/source of the illicit discharge to recover administrative and/or remediation costs. A copy of these regulations are included in Appendix B of this SWMP document.

iii. Your plan to ensure through appropriate enforcement procedures and actions that your illicit discharge ordinance (or other regulatory mechanism) is implemented.

The Butler County Storm Water District's illicit discharge detection and elimination regulations serves as the mechanism that allows the District to take action when needed to eliminate illicit discharges and to submit an invoice to the owner/source of the illicit discharge to recover administrative and/or remediation costs. Through the dry-weather screening of outfalls, the District continues to implement procedures to detect the source of any illicit discharges, then ultimately uses the regulations if necessary to implement procedures to eliminate the illicit discharge.

- iv. Your plan to detect and address illicit discharges to your system, including discharges from illegal dumping and spills. Your plan shall include dry weather field screening for non-storm water flows and Ohio EPA recommends field tests of selected chemical parameters as indicators of discharge sources. You shall describe the mechanisms and strategies you will implement to ensure outfalls which have previously been dry-weather screened will not have future illicit connections. Your plan shall also address on-site sewage disposal systems (including failing on-lot HSTSs and off-lot discharging HSTSs) that flow into your storm drainage system. Your description shall address the following, at a minimum:
  - 1. Procedures for locating priority areas which include areas with higher likelihood of illicit connections (e.g., areas with older sanitary sewer lines, for example) or ambient sampling to locate impacted reaches;

Priority areas will be located by considering areas with concentrated HSTS's, areas with concentrated resident complaints/reports, and areas of the system noted by District staff as a possible concern.

2. Procedures for tracing the source of an illicit discharge, including the specific techniques you will use to detect the location of the source;

The Butler County Storm Water District crews have the ability to provide general field investigations, CCTV inspection, dye testing, and smoke testing to help locate the source of illicit discharges. Water quality sampling may also be utilized where needed.

3. Procedures for removing the source of the illicit discharge.

Illicit discharges will be resolved on a case-by-case basis given the unique nature of each situation. The Butler County Storm Water District will continue implementing its standard operating procedures for illicit discharge detection and elimination.



4. Procedures for program evaluation and assessment.

The mapping of all outfall screening and illicit discharge issues will serve as a tool during the evaluation and assessment of the program.

v. How you plan to inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste. Include in your description how this plan will coordinate with your public education minimum measure and your pollution prevention/good housekeeping minimum measure programs.

The hazards of illicit discharges will be a topic that is covered under the multi-media BMPs described under MCM 1 earlier in this document. Training through the good housekeeping program is also utilized to inform municipal employees about the hazards associated with illegal discharges.

vi. Who is responsible for overall management and implementation of your storm water illicit discharge detection and elimination program and, if different, who is responsible for each of the BMPs identified for this program.

Refer to the tables above for the responsible party for each BMP included in the program. Generally, the Butler County Storm Water District is responsible for the implementation of the illicit discharge detection and elimination program.

vii. How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

The measureable goals were selected to be specific, measureable, achievable and realistic. The Butler County Storm Water District intends to evaluate the effectiveness of the illicit discharge detection and elimination BMPs by tracking and documenting information as described in the tables above. Adjustments will be made in the future if the Butler County Storm Water District determines that any of the BMPs are not effectively benefiting the illicit discharge detection and elimination program.



### Minimum Control Measure 4: Construction Site Storm Water Runoff Control



## Minimum Control Measure 4: Construction Site Storm Water Runoff Control

The Butler County Storm Water District MS4 permit requires the construction site storm water runoff control efforts to do the following:

Shall develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre including projects less than one acre that are part of a larger common plan of development. At a minimum this includes:

- i. Ordinance or other requirements for construction site operators to require erosion and sediment controls as well as sanctions to ensure compliance.
- ii. Requirements for construction site operators to implement appropriate erosion and sediment control BMPs.
- iii. Requirements for construction site operators to control waste at the construction site that may cause adverse impacts to water quality.
- iv. Procedures for storm water pollution prevention plan review which incorporates consideration of potential water quality impacts.
- v. Procedures for the receipt and consideration of information submitted by the public.
- vi. Procedures for site inspection and enforcement of control measures.

**Performance Standards:** Program shall include a pre-construction SWPPP for all land disturbances greater than 1 acre. Applicable sites shall be initially inspected. Frequency of follow up shall be monthly unless otherwise documented.

The following tables outline the best management practices (BMPs) selected by the Butler County Storm Water District to accomplish MCM 4. The Butler County Storm Water District has the legal authority to implement all identified BMPs.



#### **BMP: Erosion Prevention and Sediment Control Regulation**

**Description of BMP:** The Butler County Storm Water District has already developed and adopted erosion prevention and sediment control regulations, which are included in Article VII of the Butler County Subdivision Regulations. These regulations will continue to be the mechanism for enforcing the erosion prevention and sediment control program for construction site runoff. The regulation establishes the authority and means by which the Butler County Storm Water District will carry out site plan review procedures, construction site inspection, and enforcement procedures necessary to ensure compliance.

Measureable Goal	Schedule and Frequency	Responsible Party
Maintain the existing regulations requiring construction site BMPs to meet erosion prevention and sediment control regulations, and document the type and frequency of any enforcement activities that are enacted as established by Article VII of the Butler County Subdivision Regulations.	Annually	Butler County Storm Water District

**Rationale for BMP:** Continuing to maintain and utilize the erosion prevention and sediment control regulations provides the Butler County Storm Water District with an appropriate mechanism to enforce the implementation of construction site BMPs.

**How BMP addresses TMDL:** Although the Mill Creek TMDL targets are focused on nutrients, construction and land development are listed as sources of water quality pollutants. As a result, the erosion prevention and sediment control regulations can help address sedimentation issues.

#### **BMP: Construction Site Runoff Control Program Updates**

**Description of BMP:** The Butler County Storm Water District has already developed internal standard operating procedures for the erosion prevention and sediment control program. These include procedures for receiving and responding to citizen complaints about erosion control issues (i.e. tracking dirt/mud on streets) through the storm water hotline, maintaining an internal permitting database that includes workflows with each permit request, and utilizing an internal checklist for site plan review to verify consistency with Storm Water Pollution Prevention Plan (SWPPP) requirements. These internal procedures and programs will continue to be implemented and updated as needed during the permit term to ensure appropriate procedures are followed to enforce construction site runoff control activities.

Measureable Goal	Schedule and Frequency	Responsible Party
Evaluate and update construction site runoff control program as needed, including internal procedures for responding to citizen complaints, plan review process, and construction site inspection procedures.	Once during the permit term	Butler County Storm Water District

Rationale for BMP: Standardized tools and updated program objectives will aid the Butler County Storm Water District in the successful implementation of construction site runoff control.

How BMP addresses TMDL: Although the Mill Creek TMDL targets are focused on nutrients, construction and land development are listed as sources of water quality pollutants. As a result, the implementation of construction site runoff control programs can help address sedimentation issues.



#### **BMP: Construction Site Runoff Control Implementation**

**Description of BMP:** The Butler County Storm Water District will continue to implement its construction site runoff control program in accordance with the regulations already in place.

Measureable Goal	Schedule and Frequency	Responsible Party
Track the number of SWPPPs or site plans reviewed as part of the District's plan review process.	Ongoing	Butler County Storm Water District
Track the number of construction site inspections	Ongoing	Butler County Storm
completed for each active construction site.		Water District
Track the number of construction site runoff	Ongoing	Butler County Storm
control issues reported and responded to.		Water District

**Rationale for BMP:** Implementation of construction site runoff plan review and inspection activities are critical for a successful construction site runoff control program.

**How BMP addresses TMDL:** Although the Mill Creek TMDL targets are focused on nutrients, construction and land development are listed as sources of water quality pollutants. As a result, the implementation of standardized tools and program updates can help address sedimentation issues.

#### MCM 4 Decision Process – Rationale Statement

The rationale statement shall include the following information, at a minimum:

i. The mechanism (ordinance or other regulatory mechanism) you will use to require erosion and sediment controls at construction sites and why you chose that mechanism. If you need to develop this mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your SWMP description.

The Butler County Storm Water District has already developed and implemented regulations with requirements for erosion prevention and sediment control measures. These are included in Article VII of the Butler County Subdivision Regulations. The District chose to use these regulations as its mechanism to enforce the construction site runoff control program because it allows the District to issue stop-work orders when needed if any construction site activities are conducted in violation of the approved SWPPP. A copy of these regulations are included in Appendix C of this SWMP document.

ii. Your plan to ensure compliance with your erosion and sediment control regulatory mechanism, including the sanctions and enforcement mechanisms you will use to ensure compliance. Describe your procedures for when you will use certain sanctions. Possible sanctions include non-monetary penalties (such as a stop work orders), fines, bonding requirements, and/or permit denials for non-compliance.

Article VII of the Butler County Subdivision Regulations includes a section on enforcement and penalties for non-compliance. This section of the regulations gives the District the authority to issue stop-work orders when needed if any construction site activities are conducted in violation of the approved SWPPP.



iii. Your requirements for construction site operators to implement appropriate erosion and sediment control BMPs and control waste at construction sites that may cause adverse impacts to water quality. Such waste includes, but is not limited to, discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste.

All requirements are detailed in Article VII of the Butler County Subdivision Regulations.

iv. Your procedures for pre-construction storm water pollution prevention plan review which incorporate consideration of potential water quality impacts. Describe the estimated number of sites that will have pre-construction site plans reviewed.

All proposed construction sites in the District's service area are required to go through the plan review process which includes the development of a SWPPP for erosion control. The Butler County Storm Water District implements procedures for the plan review process, including a permitting database with a workflow that comes with each permit request. This process ensures that the construction site plans are routed appropriately internally for review and comment prior to construction activities.

v. Your procedures for receipt and consideration of information submitted by the public. Consider coordinating this requirement with your public education program.

Information submitted by the public related to construction erosion issues are inspected by the Butler County Storm Water District staff, and the District coordinates with the contractor to resolve the issue. These citizen complaints are typically received through the storm water hotline and documented through the database and response program to track information specific to the nature of inquiry, as well as complaint resolution.

vi. Your procedures for site inspection and enforcement of control measures, including how you will prioritize sites for inspection.

The Butler County Storm Water District is responsible for conducting monthly inspections of all active construction sites, and additional inspections as needed. Active construction sites are documented through internal databases, which allows the District to prioritize inspections when necessary.

vii. Who is responsible for overall management and implementation of your construction site storm water control program and, if different, who is responsible for each of the BMPs identified for this program.

The Butler County Storm Water District is responsible for the review and approval of plan submittals including SWPPPs, as well as site inspections.

viii. Describe how you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

The measurable goals were selected to be specific, measurable, achievable and realistic. The Butler County Storm Water District intends to evaluate the effectiveness of the construction site runoff control BMPs by tracking and documenting information as described in the tables above. Adjustments will be made in the future if the Butler County



Storm Water District determines that any of the BMPs are not effectively benefiting the construction site storm water runoff control program.



## Minimum Control Measure 5: Post-Construction Storm Water Management in New and Redevelopment



## Minimum Control Measure 5: Post-Construction Storm Water Management in New and Redevelopment

The Butler County Storm Water District MS4 permit requires the post-construction storm water management in new and redevelopment efforts to do the following:

Shall develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development.

Shall develop and implement strategies which include a combination of structural and/or non-structural BMPs.

Shall use an ordinance, or other regulatory mechanism, to address postconstruction runoff from new and redevelopment.

Shall ensure adequate long-term operation and maintenance of BMPs.

**Performance Standards:** Post construction SWMP shall include a pre-construction SWPPP review of all projects which disturb greater than 1 acre. Site shall be inspected to ensure controls are installed per requirements. Program shall ensure long term O&M plans are developed and agreements are in place.

The following tables outline the best management practices (BMPs) selected by the Butler County Storm Water District to accomplish MCM 5. The Butler County Storm Water District has the legal authority to implement all identified BMPs.

#### **BMP: Post-Construction Storm Water Management Regulation**

**Description of BMP:** The Butler County Storm Water District has already developed and adopted post-construction storm water management regulations, which are primarily included in Article V of the Butler County Subdivision Regulations. Post-construction storm water management requirements and regulations are also included in the Butler County Flood Damage Prevention Regulations, Butler County Zoning Code, Township Zoning Code (Fairfield, Liberty, St. Claire, Wayne, West Chester), and the City of Trenton Subdivision Regulations and Zoning. These regulations will continue to be the mechanism for enforcing the post-construction storm water runoff program for new development and redevelopment projects throughout the County. These regulations establish the authority and means by which the Butler County Storm Water District will carry out site plan review procedures, construction and post-construction site inspections, and enforcement procedures necessary to ensure compliance.

Measureable Goal	Schedule and Frequency	Responsible Party
Maintain the existing regulations requiring post- construction site BMPs to meet water quantity and water quality regulations, and document the type and frequency of any enforcement activities that are implemented as established by Article V of the Butler County Subdivision Regulations.	Annually	Butler County Storm Water District and Co-Permittees



Rationale for BMP: Continuing to maintain and utilize the post-construction runoff control regulations provides the Butler County Storm Water District with an appropriate mechanism to enforce the implementation of post-construction site BMPs to address water quantity and improve water quality. How BMP addresses TMDL: A variety of post-construction water quality BMPs can address multiple pollutants of concern, including green infrastructure features such as rain gardens, bioswales, and bioretention basins. These water quality BMPs could minimize nutrient pollutant loadings coming from new development or redevelopment project sites, which would be consistent with the objectives of the Mill Creek TMDL.

#### **BMP: Post-Construction Storm Water Management Program Updates**

**Description of BMP:** The Butler County Storm Water District has already developed internal standard operating procedures for the post-construction storm water management program. These include an internal permitting database that includes workflows with each permit request, and an internal checklist for site plan review to verify consistency with post-construction requirements for water quantity and water quality. These internal procedures and programs will continue to be implemented and updated as needed during the permit term to ensure appropriate procedures are followed to enforce post-construction storm water management activities.

Measureable Goal	Schedule and Frequency	Responsible Party
Evaluate and update post-construction storm water management program as needed, including internal procedures for plan review process and	Once during the permit term	Butler County Storm Water District
construction site inspection procedures.		

**Rationale for BMP:** Standardized tools and updated program objectives will aid the Butler County Storm Water District in the successful implementation of this MCM.

**How BMP addresses TMDL:** The implementation of post-construction storm water management programs can help address nutrient issues by ensuring that appropriate water quality BMPs are constructed with new development and redevelopment projects.



#### **BMP: Post-Construction Storm Water Management Implementation**

**Description of BMP:** This BMP includes implementation of the post-construction storm water management program in accordance with the regulations already in place.

Measureable Goal	Schedule and Frequency	Responsible Party
Track the number of site plans (those required to obtain Ohio EPA Construction General Permit) reviewed as part of the District's plan review process.	Ongoing	Butler County Storm Water District
Track the number of construction and post- construction site inspections completed for each project site that has post-construction BMPs.	Ongoing	Butler County Storm Water District
Track the number of privately-owned and publicly-owned post-construction BMPs installed and add to the District's storm sewer system mapping database.	Ongoing	Butler County Storm Water District

**Rationale for BMP:** Implementation of post-construction storm water management plan review and inspection activities are critical for a successful post-construction storm water management program. **How BMP addresses TMDL:** Post-construction storm water management implementation will keep designers and contractors accountable for the proper design and installation of BMPs, which will ultimately provide water quality benefits to help meet the TMDLs.

#### **BMP: Long-Term Operation and Maintenance Plans and Agreements**

**Description of BMP:** Section 5.07 of the Butler County Subdivision Regulations provides an overview of requirements associated with post-construction operation and maintenance plans associated with privately-owned storm water management facilities at residential subdivisions. The developer of any residential subdivision with a storm water system must provide the Butler County Planning Department with written evidence of a perpetual post-construction storm water operation and maintenance plan and the manner in which it is to be funded. Once the plan has been approved by the County Engineer, the owner/developer shall record the document at the County Recorder's Office. Proof of recording will be required prior to final plat approval. Publicly-owned post-construction storm water management facilities are inspected and maintained by the Butler County Storm Water District.

Measureable Goal	Schedule and Frequency	Responsible Party
Track the location and number of maintenance agreements that are established for privately-owned post-construction storm water management facilities.	Ongoing	Butler County Storm Water District
Track the location and number of inspections that the District performs on publicly-owned post-construction storm water management facilities.	Ongoing	Butler County Storm Water District

**Rationale for BMP:** The creation and implementation of operation and maintenance plans and agreements provides a mechanism to ensure that long-term performance of post-construction storm water management facilities is achieved.

**How BMP addresses TMDL:** Long-term operation and maintenance of post-construction water quality BMPs that can reduce nutrient loads is important to maintain long-term performance to meet water quality objectives of the Mill Creek TMDL.



#### **MCM 5 Decision Process – Rationale Statement**

The rationale statement shall include the following information, at a minimum:

i. Your program to address storm water runoff from new development and redevelopment projects. Include in this description any specific priority areas for this program.

The Butler County Storm Water District requires by regulations that all new and redevelopment projects that disturb greater than 1 acre to implement post-construction storm water runoff control, both for water quantity and water quality. These regulations are described in Article V of the Butler County Subdivision Regulations. A copy of these regulations are included in Appendix D of this SWMP document.

ii. How your program will be specifically tailored for your local community, minimize water quality impacts, and attempt to maintain pre-development runoff conditions.

Per the Butler County Subdivision Regulations, the designer/contractor must submit a detailed SWPPP including post-construction storm water control techniques with sizing calculations and drawings. The Butler County Storm Water District then reviews the submittal and coordinates with the designer/contractor to address any deficiencies. This site-specific review by District staff is the component that allows the program to be specifically tailored for the local community.

iii. Any non-structural BMPs in your program, including, as appropriate: green infrastructure storm water management techniques, policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and other measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, and source control measures often thought of as good housekeeping, preventive maintenance and spill prevention.

The Butler County Storm Water District and co-permittees have developed policies and regulations for non-structural BMPs, which are documented in the following:

- Butler County Subdivision Regulations
- Butler County Flood Damage Prevention Regulations
- Butler County Zoning Code
- Township Zoning Code (Fairfield, Liberty, St. Clair, Wayne, West Chester)
- City of Trenton Subdivision Regulations and Zoning
- iv. Any structural BMPs in your program, including, as appropriate: green infrastructure storm water management techniques, storage practices such as wet



ponds and extended-detention outlet structures; filtration practices such as grassed swales, bioretention cells, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches.

The Butler County Storm Water District has mapped all of the structural post-construction storm water BMPs that have been installed within the Phase II MS4 service area on previous new development and redevelopment projects. The mapping database includes information on the specific type of post-construction water quality BMP. The District's post-construction water quality BMP regulations reference several documents that include acceptable post-construction BMPs, including the Ohio EPA Construction General Permit, the Ohio Department of Natural Resources (ODNR) Rainwater and Land Development Manual, and the Ohio Department of Transportation (ODOT) Location and Design Manual.

v. The mechanisms (ordinance or other regulatory mechanisms) you will use to address post-construction runoff from new developments and redevelopments and why you chose the mechanism(s). If you need to develop a mechanism, describe your plan and a schedule to do so. If your ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with your program.

The Butler County Storm Water District has already developed and implemented regulations with requirements for post-construction storm water runoff management. These are included in Article V of the Butler County Subdivision Regulations. Section 5.09 (Failure to Comply) of these regulations describe the enforcement actions the County has the ability to implement in any circumstances of non-compliance.

vi. How you will ensure the long-term operation and maintenance (O&M) of your selected BMPs. Options to help ensure that future O&M responsibilities are clearly identified include an agreement between you and another party such as the post-development landowners or regional authorities.

Refer to the table above for information on the Butler County Storm Water District BMP related to long-term operation and maintenance plans and agreements for post-construction storm water management facilities at residential subdivisions.

vii. Who is responsible for overall management and implementation of your postconstruction SWMP and, if different, who is responsible for each of the BMPs identified for this program.

The Butler County Storm Water District is responsible for the overall management and implementation of the post-construction storm water management program.

viii. How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

The measurable goals were selected to be specific, measurable, achievable and realistic. The Butler County Storm Water District intends to evaluate the effectiveness of the construction site runoff control BMPs by tracking and documenting information as described in the tables above. Adjustments will be made in the future if the Butler County Storm Water District determines that any of the BMPs are not effectively benefiting the post-construction storm water management program.



### Minimum Control Measure 6: Pollution Prevention/Good Housekeeping For Municipal Operations



## Minimum Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations

The Butler County Storm Water District MS4 permit requires the pollution prevention/good housekeeping for municipal operations efforts to do the following:

Shall develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

Using training materials available from OEPA or other organizations, program shall include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

Shall include a list of industrial facilities owned and operated by the Butler County Storm Water District. SWP3 plans shall be developed and implemented as required.

**Performance Standards:** Include at minimum an annual employee training. Operation and maintenance shall include appropriate documented procedures, controls, maintenance schedules, and record keeping.

The following tables outline the best management practices (BMPs) selected by the Butler County Storm Water District to accomplish MCM 6. The Butler County Storm Water District has the legal authority to implement all identified BMPs.

#### **BMP: Employee Training Program**

**Description of BMP:** The Butler County Storm Water District will continue implementing an employee training program for municipal employees. The topics of the employee training varies by municipal facility, but have included spill identification and emergency response, spill prevention control countermeasures, construction site runoff control, and snow / ice control. The Butler County Storm Water District also has a variety of storm water education videos that are made available to municipal employees and all co-permittees as good housekeeping programs are updated. The Butler County Storm Water District also encourages all co-permittees to conduct good housekeeping training within their jurisdictions.

Measureable Goal	Schedule and Frequency	Responsible Party
Document the number of staff who receive training each year, with a goal of training all employees at each municipal facility at least once during the permit term.	Annually	Butler County Storm Water District

**Rationale for BMP:** Training municipal staff is a very important aspect of reducing pollution from municipal facilities. Using materials already available results in efficiencies and consistent messaging. **How BMP addresses TMDL:** Reducing pollution from municipal facilities could include reduction of nutrient loads consistent with the Mill Creek TMDL.



#### **BMP: Implementation of SWPPP at Municipal Facilities**

**Description of BMP:** The Butler County Storm Water District has already developed a Storm Water Pollution Prevention Plan (SWPPP) at all 14 municipal facilities located within the MS4 service area. These facilities are as follows:

- 1. Butler County Engineer's Office
- 2. City of Trenton
- 3. Fairfield Township (Morris Road)
- 4. Fairfield Township (Tylersville Road)
- 5. Hanover Township
- 6. Lemon Township
- 7. Liberty Township
- 8. Madison Township
- 9. Ross Township
- 10. St. Clair Township
- 11. Village of New Miami
- 12. Village of Seven Mile
- 13. Wayne Township
- 14. West Chester Township

The District and co-permittees will continue implementing the recommendations included in the SWPPP at each of these facilities. The co-permittees will continue to self-inspect their own respective facilities annually.

Measureable Goal	Schedule and Frequency	Responsible Party
Inspect each of the 14 municipal facilities annually, and document any findings that require adjustments to the SWPPP document at each facility.	Annually	Butler County Storm Water District

**Rationale for BMP:** The implementation of SWPPPs can result in reduced pollutant loadings of storm water runoff coming from the municipal facilities.

**How BMP addresses TMDL:** Reducing pollution from municipal facilities could include reduction of nutrient loads consistent with the Mill Creek TMDL.



#### **BMP: Operation and Maintenance Program**

**Description of BMP:** The Butler County Storm Water District will continue implementation of activities associated with the District's Operation and Maintenance Program for municipal facilities.

Measureable Goal	Schedule and Frequency	Responsible Party
Document the quantity of wastes disposed of, including automotive fluids recycled, tires, and batteries.	Annually	Butler County Storm Water District
Document the amount of road salt or brine applied to roads.	Seasonal	Butler County Storm Water District
Document the amount of pesticide and herbicide applied.	Annually	Butler County Storm Water District
Document the amount of fertilizer used.	Annually	Butler County Storm Water District
Document the miles of streets cleaned through street sweeping activities.  Approximately 372 miles of curbed streets are located within the co-permittee jurisdictions.	Annually	Butler County Storm Water District
Document the length of storm sewer where CCTV and flushing/cleaning activities occur.	Annually	Butler County Storm Water District
Identify locations of all catch basin sumps installed in recent years and update storm sewer system mapping. Document the number of catch basin sumps cleaned once all sump locations have been identified.	To be completed by end of permit term.	Butler County Storm Water District

**Rationale for BMP:** Implementing the operation and maintenance program is critical for reducing pollution from the MS4 service area.

**How BMP addresses TMDL:** Reducing pollution as a result of operation and maintenance program implementation could reduce nutrient loads consistent with the Mill Creek TMDL.

#### MCM 6 Decision Process - Rationale Statement

The rationale statement shall include the following information, at a minimum:

i. Your operation and maintenance program to prevent or reduce pollutant runoff from your municipal operations. Your program shall specifically list the municipal operations that are impacted by this operation and maintenance program.

Refer to the tables above for operation and maintenance programs to prevent or reduce pollutant runoff from municipal operations, including BMPs associated with employee training, implementation of SWPPPs, and overall operation and maintenance program. The SWPPPs at each of the 14 municipal facilities will continue to be implemented to reduce pollutants from the municipal facilities.

ii. Any government employee training program you will use to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm



water system maintenance. Describe any existing, available materials you plan to use. Describe how this training program will be coordinated with the outreach programs developed for the public information minimum measure and the illicit discharge minimum measure.

Refer to the table above for information related to the employee training program. This program will be coordinated with Illicit Discharge and Public Outreach programs to the extent that the information provided in all programs will be consistent and will be cross-referenced as appropriate.

#### iii. Your program description shall specifically address the following areas:

1. Maintenance activities, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to your MS4.

Refer to the table above for information related to maintenance activities to reduce floatables or other pollutants to the MS4. These activities include the documentation of wastes disposed of, amount of road salt or brine applied to roads, amount of pesticide and herbicide applied, amount of fertilizer used, amount of street miles where street sweeping occurs, length of storm sewer where CCTV and flushing/cleaning activities occur, and documentation of catch basin sumps.

2. Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas you operate. A description of the materials used for roadway and municipal parking lot winterization (use of salt, sand, bottom ash, etc. or combination thereof), associated application rates, and the rationale for the selected application rates shall be included. Also identify controls or practices to be used for reducing or eliminating discharges of pollutants resulting from roadway and municipal parking lot winterization activities.

The Butler County Storm Water District currently implements street sweeping, snow and ice removal, catch basin cleaning, pipe cleaning, as well as general good housekeeping at municipal facilities.

3. Procedures for the proper disposal of waste removed from your MS4 and your municipal operations, including dredge spoil, accumulated sediments, floatables, and other debris.

The District utilizes proper methods to dispose of wastes from the MS4. Debris from street sweeping activities is dumped on a concrete pad and the solids are scooped and placed in a dumpster for disposal.

4. Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices.

These procedures are covered in the Butler County Subdivision Regulations.



iv. Who is responsible for overall management and implementation of your pollution prevention/good housekeeping program and, if different, who is responsible for each of the BMPs identified for this program.

Refer to the tables above for the responsible party for each BMP included in the program. The Butler County Storm Water District is responsible for the implementation of the good housekeeping MCM.

v. How you will evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs.

The measureable goals were selected to be specific, measureable, achievable and realistic. The Butler County Storm Water District intends to evaluate the effectiveness of the good housekeeping program by tracking and documenting information as described in the tables above. Adjustments will be made in the future if the Butler County Storm Water District determines that any of the BMPs are not effectively benefiting the good housekeeping / pollution prevention program.



# Appendix A Regional Storm Water Collaborative Information



**Regional Storm Water Collaborative**: The Butler County Storm Water District is an active and participating member of the Greater Cincinnati "Regional Storm Water Collaborative." The Collaborative is composed of storm water districts, municipalities, townships and soil and water conservation districts in Southwest Ohio and Northern Kentucky. Its purpose is to raise awareness about water quality and storm water management issues in the region. More information on the Collaborative is available on its web site at <a href="https://www.savelocalwaters.org">www.savelocalwaters.org</a>.

In partnership with the Butler County Storm Water District and member MS4 permittees, the Regional Storm Water Collaborative will conduct storm water education and awareness programs for the following five themes over the course of the 2014-2019 permit cycle:

#### 1. Rain Barrels

Target Audience – Property Owners

Target Pollutant – Storm Water Runoff Volume and Flow Rate (Hydromodification)

In 2015 and 2016, the Regional Storm Water Collaborative will organize and host the Rain Barrel Art Project, an event first held in 2013. This Rain Barrel Art Project was created to promote the use of rain barrels throughout the Ohio River Valley area through a creative and educational medium. Rain barrels continue to grow in popularity across the country; however, one of the biggest drawbacks is their dull appearance. The Collaborative believes that producing beautiful artistic rain barrels that have unique painted details will make them more desirable and naturally increase interest in their use.

Local artists will be invited to submit their rain barrel artwork at the beginning of each year. From these, the Collaborative will select up to 50 designs for the rain barrels. After the artwork has been selected, the Collaborative will hold a workshop for the artists where they will learn the painting techniques and pick up their rain barrel barrels. The barrels will be displayed at the Cincinnati Zoo and Botanical Gardens from April 1 until the date of the event, at which time they will be auctioned during the Zoo's "Party for the Planet," which is attended by 3,000-5,000 people each year. Proceeds from the auction will be divided equally between the Collaborative and the Cincinnati Zoo. All proceeds received by the Collaborative will be used for future education and awareness campaigns. After 2016, the Collaborative will conduct a re-evaluation and decide if it will continue to host the Rain Barrel Art Project in subsequent years.

#### 2. Household Conservation Practices

Target Audience – Residents of Greater Cincinnati

Target Pollutants – Household Hazardous Waste, Solid Waste/Litter, Pet Waste,

Automotive Fluids

At least once during the permit cycle, the Regional Storm Water Collaborative will develop an education campaign related to household conservation practices that help reduce pollutant loadings to the MS4. Specific topics may include proper disposal of household hazardous wastes and use of alternative non-hazardous products, solid waste and recycling, pet waste, automotive maintenance and/or other household activities.

#### 3. Fertilizer & Nutrient Runoff Reduction

Target Audience – Property Owners Target Pollutant - Nutrients

Nutrients are a common cause of stream impairment throughout southwest Ohio. The Collaborative will develop an education and awareness campaign targeted at property owners focusing on fertilizer and nutrient runoff reduction. The campaign may include information on soil testing to determine nutrient needs prior to fertilizing, proper application of fertilizers, and management practices such as stream buffers to reduce nutrient runoff.

#### 4. Erosion & Sediment Control

Target Audience – Development Community
Target Pollutant - Sediments

Once every three years, the Collaborative will seek to partner with the Cincinnati Homebuilders Association to install a rain garden at a Homearama display home. Homearama, generally held each year over a two week period in July, is Ohio's largest home expo. More than 35,000 attended the event in 2014. Most people attend Homearama each year not to purchase a home, but to get ideas for their own homes. Developers and homebuilders also pick up ideas from their colleagues. By having a rain garden on display during Homearama, the Collaborative will help promote the use of rain gardens to both homeowners and builders throughout the Greater Cincinnati area.

Also under this program, the Collaborative will help sponsor the Erosion & Sediment Control Field day held by Ohio Department of Natural Resources Division of Soil & Water Resources (ODNR-DSWR) and soil and water conservation districts in Area IV. As of 2015, ODNR-DSWR intends to hold this event annually, with the location rotating through the 19 counties within Area IV. The Regional Storm Water Collaborative will sponsor this event when it is held in Butler, Clermont, Hamilton or Warren Counties.

#### 5. General Storm Water Programs

Target Audience – Greater Cincinnati residents Target Pollutant – General Storm Water Pollution

During the current permit cycle, the Collaborative will seek to raise the awareness of Greater Cincinnati area residents regarding general storm water and watershed management topics (e.g., what is storm water runoff, what problems does runoff pose for our streams and lakes, what is a watershed, and other general topics).

#### **Outreach Strategy**

The Collaborative will use various methods to conduct the educational campaigns listed above. Information will be distributed through the Collaborative's web site (<a href="www.savelocalwaters.org">www.savelocalwaters.org</a>) and through different social media outlets, such as Facebook (<a href="www.facebook.com/SaveLocalWaters">www.facebook.com/SaveLocalWaters</a>),

Twitter (@SaveLocalWaters) and YouTube (www.youtube.com/user/projectearthcincy). Also each year, the Collaborative will conduct at least one major campaign using radio and/or television advertising. To help MS4 permittees and other environmental professionals improve their education programs, the Collaborative will hold a minimum of one training workshop a year (topics will vary). Specific efforts and results for each educational campaign will be provided in the MS4 Annual Report

#### **Program Evaluation**

Regional Storm Water Collaborative partners meet on a regular basis (generally monthly) to plan educational campaigns and review the successes of recently completed efforts and review possible program improvements. Any major adjustments to the overall program described above will be proposed to Ohio EPA in the MS4 Annual Report.

# Appendix B Illicit Discharge Detection and Elimination Regulations



# ILLICIT DISCHARGE DETECTION AND ELIMINATION REGULATIONS



### **BUTLER COUNTY, OHIO**

As Adopted: November 12, 2009

**Butler County Board of Commissioners:** 

Donald L. Dixon Gregory V. Jolivette Charles R. Furmon

Butler County Administrative Center 130 High Street, Hamilton, OH 45011 Phone: (513) 887-3413 Fax: (513) 785-5723

### Resolution No. 09-11-1954 Resolved By the Board of County Commissioners of Butler County, Ohio, That

WHEREAS, the Board of County Commissioners did establish the "Ohio Revised Code Section 6117 Butler County Storm Sewer District" (Resolution No. 02-3-267) for the purpose of administering the NPDES Phase II Permit for Butler County; and

WHEREAS, Ohio Revised Code Section 6117.01(D) provides County Commissioners may adopt, publish, administer, and enforce rules for the...protection, and use of county-owned or county-operated...drainage facilities outside municipal corporation, and of sanitary and drainage facilities within municipal corporations that are owned or operated by the county or that discharge into sanitary or drainage facilities owned or operated by the county...The rules shall not be inconsistent with the laws of this state or any applicable rules of the director of environmental protection; and

WHEREAS, Butler County also submitted to the Ohio EPA the Butler County Storm Water Management Plan which outlines six Minimum Control Measures which are expected to result in reductions in pollutants discharged within Butler County. Section 3.4 of the SWMP requires: "To the extent allowable under State or local law, the District will effectively prohibit, through ordinance, or other regulatory mechanism, illicit discharges into its storm sewer system and implement appropriate enforcement procedures and actions."; and

WHEREAS, said regulations have been drafted and distributed to interested parties for their review and input;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby adopts the following illicit discharge detection and elimination regulations.

#### Resolution No. 09-11-1954

Requestor : Annette Peters

Request Date: November 06, 2009

Commissioner Furmon moved for the adoption of the foregoing resolution. Commissioner Jolivette seconded the motion and upon call of the roll the vote resulted as follows:

Commissioner Dixon Yea
Commissioner Jolivette Yea

Commissioner Furmon Yea

Adopted: November 12, 2009

Attest: More R. Sutlee \_\_\_\_\_, clerk

# BUTLER COUNTY ILLICIT DISCHARGE AND CONNECTION STORMWATER RULES AND REGULATIONS RESOLUTION NO. 09-11-1954

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#### ILLICIT DISCHARGE DETECTION AND ELIMINATION REGULATIONS

#### **RESOLUTION NO. 09-11-1954**

#### **SECTION 1 - GENERAL PROVISIONS**

#### 1.1 Purpose and Intent

The purpose of these Rules and Regulations are to provide for the health, safety, and general welfare of the citizens of Butler County, Ohio and specifically those located in the unincorporated areas thereof and the various local jurisdictions who are members of the Butler County Storm Water District ("BCSWD") through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. These Rules and Regulations establish methods and standards for best management practices (BMPs) for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) Phase II permit process and as required by the Butler County Storm Water Management Plan. These Rules and Regulations are created and enacted by the statutory authority contained in Ohio Revised Code Sections 307.15, 6117.01(D) and 6117.01.2, as amended.

The objectives of these Rules and Regulations are:

- A. To regulate the contribution of pollutants to the Municipal Separate Storm Sewer System (MS4) owned or operated by Butler County and member jurisdictions of the BCSWD by stormwater discharges by any user of the MS4;
- B. To prohibit Illicit Connections and Discharges to the Municipal Separate Storm Sewer System (MS4);
- C. To protect water quality and satisfy the requirements of the Clean Water Act, Ohio Law, and Ohio Revised Code, including Section 6111 thereof; and
- D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this Regulation.

#### 1.2 Definitions

For the purposes of this Regulation, the following terms shall be interpreted to mean:

A. "<u>Authorized Enforcement Agency</u>" shall mean employees or designees of the director of the governmental agency designated to enforce these Rules and Regulations. The Butler County Storm Water District, and its designee, shall be

responsible for those matters of which Butler County has jurisdiction. When this Regulation is used by a Local Jurisdiction that has its own statutory or home-rule powers and responsibility for compliance with a NPDES permit, such as a municipal corporation or authorized home rule township, this definition shall include such Local Jurisdiction or its legally authorized designee, as determined by such Local Jurisdiction.

- B. "Best Management Practices (BMPs)" shall mean schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.
- C. "Board of Appeals" shall mean the Butler County Residential Board of Appeals.
- D. "Clean Water Act" shall mean the Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.
- E. "Commercial Activity" shall mean activities which are undertaken as part of a commercial enterprise. These activities include but are not limited to warehouses; building supply facilities; retail gasoline stations; automobile service stations; junk yards; automobile dealerships; retail warehouses; repair and service establishments for appliances and other goods; professional offices; bank and credit unions; office buildings; retail businesses selling foods or merchandise; golf courses; hospitals and clinics; religious institutions; hotels; motels; and parking facilities.
- F. "Construction Activity" shall mean activities subject to NPDES Construction Permits. These include construction projects resulting in land disturbance of 5 acres or more. As of March 2003, NPDES Storm Water Phase II permits are required for construction projects resulting in land disturbance of 1 acre or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating, and demolition, or other alterations of land surface where natural or man-made ground cover is destroyed in a manner exposing underlying soil.
- G. "County" shall mean Butler County, Ohio, and its designated agencies, agents and representatives.
- H. "<u>Hazardous Materials</u>" shall mean any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the

- environment when improperly treated, stored, transported, disposed of, or otherwise managed.
- I. "<u>Illegal Discharge</u>" shall mean any direct or indirect discharge to the Storm Drainage System that is not entirely composed of Storm Water, except as otherwise exempted in this Regulation.
- J. "<u>Illicit Connection</u>" shall mean an illicit connection is defined as either of the following:
  - (1) Any drain or conveyance, whether on the surface or subsurface, which allows an Illegal Discharge to enter the Storm Drainage System including but not limited to any conveyances which allow any Non-Storm Water Discharge including sewage, process wastewater, and wash water to enter the Storm Drainage System and any connections to the Storm Drainage System from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an Authorized Enforcement Agency; or
  - (2) Any drain or conveyance connected from a commercial or industrial land use to the Storm Drainage System which has not been documented in plans, maps, or equivalent records and approved by an Authorized Enforcement Agency.
- K. "<u>Illicit Discharge</u>" See definition of Illegal Discharge in these Rules and Regulations.
- L. "<u>Industrial Activity</u>" shall mean activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b)(14), or activities of an industrial nature not covered by the NPDES Industrial Permit.
- M. "Local Jurisdiction" shall mean a city, township, town, or village within Butler County and which operates an MS4, and has ultimate responsibility for compliance with an NPDES permit for Storm Drainage System from MS4's.
- N. "Maximum Extent Practical" shall mean the level of pollution reduction that operators of small municipal separate storm sewer systems regulated under 40 C.F.R. Parts 9, 122, 123, and 124, referred to as NPDES Storm Water Phase II, must establish.
- O. "<u>Municipal Separate Storm Sewer System (MS4)</u>" shall mean a conveyance or system of conveyances (including roads with drainage systems, streets, catch basis, curbs, gutters, ditches, man-made channels or storm drains) that are:
  - (1) Owned or operated by the state, municipality, township, county, district(s) or other public body (created by or pursuant to state or federal law)

including special districts under state law such as a sewer district, flood control district, or drainage districts or similar entity or a designated and approved management agency that discharges into surface waters of the state;

- (2) Designed or used for collecting or conveying solely Storm Water,
- (3) Which is not a combined sewer; and
- (4) Which is not a part of a publicly owned treatment works.
- P. "National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit" shall mean a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to Waters of the State and/or United States, whether the permit is applicable to an individual, group, or general area-wide basis.
- Q. "Non-Point Source Pollution" shall mean substances that are harmful to the environment that are generated by various land use activities rather than from an identifiable or discrete source, and which is conveyed to waterways through natural processes, such as rainfall, storm runoff, or ground water seepage, rather than by direct discharge.
- R. "<u>Non-Storm Water Discharge</u>" shall mean any discharge to the Storm Drainage System that is not composed entirely of Storm Water.
- S. "Person" shall mean any individual, trust, association, organization, partnership, firm, limited liability company, corporation (municipal or private), township, county, state agency, federal government, or any combination thereof, or other entity recognized by law and acting as either the owner or as the owner's agent.
- T. "Pollutant" shall mean 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; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordnances, and accumulations, so that same may cause or contribute to pollution; 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.
- U. "Pollution" shall mean the placing of any noxious or deleterious substance in any Waters of the State or affecting the properties of any Waters of the State in a manner which renders such waters harmful or inimical to the public health, or to animal or aquatic life, or to the use of such water for domestic water supply, or industrial or agricultural purposes, or for recreation.

- V. "<u>Premises</u>" shall mean any building, lot, parcel or tract of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking areas associated with the adjacent land.
- W. "Storm Drainage System" shall mean publicly or privately owned or operated facilities and infrastructure by which Storm Water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.
- X. "Storm Water" shall mean any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.
- Y. "Storm Water Pollution Prevention Plan" shall mean a document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce Pollutant Discharges to Storm Water, Storm Water Conveyance Systems, and/or receiving waters to the Maximum Extent Practicable.
- Z. "<u>Violator</u>" shall mean any person, property owner, occupant, or operator who causes and allows an illicit discharge, or any other discharge not allowed by the Clean Water Act, to enter the MS4.
- AA. "<u>Wastewater</u>" shall mean any water or other liquid, other than uncontaminated Storm Water, discharged from a facility.
- BB. "<u>Watercourse</u>" shall mean as defined in County Subdivision Regulations, Section 2.113, meaning a definite channel with bed and banks within which concentrated water flows, either continuously or intermittently.
- CC. "Waters of the State" shall have that meaning as contained in ORC 6111.01(H).
- DD. "Waters of the United States" shall have that meaning as contained in 33 CFR Part 328, Section 328.1 through 328.3, as amended.

#### 1.3 Word Usage

For purposes of these Rules and Regulations, certain rules of word usage apply as follows:

A. Words used in the present tense include the future tense, and singular tense includes the plural tense.

- B. The term "shall" is always construed to be mandatory and not discretionary. The word "may" is deemed to mean permissive. The term "should" is permissive, but indicates a recommended action.
- C. Any word or term that is not interpreted or defined within these Rules and Regulations shall be construed according to the rules of grammar and common usage, so as to give these Regulations the most reasonable application.

#### **SECTION 2 - APPLICABILITY.**

These Rules and Regulations shall apply to all water entering the Storm Drainage System generated on any developed and undeveloped lands unless otherwise explicitly exempted by the Authorized Enforcement Agency or by applicable law.

#### SECTION 3 - RESPONSIBILITY FOR ADMINISTRATION.

The Authorized Enforcement Agency shall administer, implement, and enforce the provisions of these Rules and Regulations. Any powers granted or duties imposed upon the Authorized Enforcement Agency may be delegated in writing by the Director of the Authorized Enforcement Agency to persons or entities acting in the beneficial interest of, or in the employ of said agency.

#### **SECTION 4 - SEVERABILITY.**

The provisions of these Rules and Regulations are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Regulation or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this Regulation.

#### **SECTION 5 - ULTIMATE RESPONSIBILITY.**

The standards set forth herein and promulgated pursuant to these Rules and Regulations are minimum standards; therefore these Rules and Regulations do not intend, nor imply, that compliance by any Person will permit any Person to cause contamination, Pollution, nor unauthorized discharge of Pollutants. All applicable state and federal laws, rules and regulations related to illicit, hazardous, or Pollutant discharges remain in full force and effect.

#### **SECTION 6 - DISCHARGE PROHIBITIONS.**

#### 6.1 Prohibition of Illegal Discharges.

No Person shall, or allow another Person under its control to, discharge or cause to be discharged into the Municipal Storm Drainage System or watercourses any materials, including but not limited to Pollutants or waters containing any Pollutants that cause or contribute to a violation of applicable water quality standards, other than Storm Water.

The commencement, conduct or continuance of any Illegal Discharge to the Storm Drainage System is prohibited, except as described as follows:

- A. The following discharges shall not constitute a violation of the discharge prohibitions established by these Rules and Regulations: water line flushing or other uncontaminated potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wet-land flows, swimming pools (if dechlorinated typically less than one PPM chlorine), fire fighting activities, and any other water source not containing Pollutants.
- B. Discharges specified in writing by the Authorized Enforcement Agency as being necessary to protect public health and safety, or which are otherwise permitted under these Rules and Regulations and applicable law, including those matters set forth in Ohio Revised Code, Section 6111.04.
- C. Dye testing is an allowable discharge, but requires a written notification to the Authorized Enforcement Agency prior to the commencement of the test.
- D. The prohibitions herein shall not apply to any Non-Storm Water Discharge permitted under a valid and unexpired NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and further provided that prior written approval has been granted for any discharge to the Storm Drainage System.

#### 6.2 Prohibition of Illicit Connections.

The construction, use, maintenance or continued existence of Illicit Connections to the Storm Drainage System and MS4 is strictly prohibited.

A. This prohibition expressly includes, without limitation, Illicit Connections made prior to the enactment of these Rules and Regulations, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of such connection, subject to Ohio Revised Code, Section 6111.04 (A) and (B), and applicable law.

B. A Person is considered to be in violation of these Rules and Regulations if the Person connects a line conveying sewage to the MS4, or allows such a connection, whether new or existing, to continue after the approval of these Rules and Regulations, unless otherwise exempted by the Authorized Enforcement Agency or otherwise permitted by law.

#### SECTION 7 - SUSPENSION OF MS4 ACCESS.

#### 7.1 Suspension due to Illicit Discharges in Emergency Situations

The Authorized Enforcement Agency may, in an emergency, without prior notice, suspend MS4 discharge access to a Person when such suspension is necessary to stop an actual or threatened discharge which presents imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4, Waters of the United States or Waters of the State. The Authorized Enforcement Agency shall make a reasonable attempt to contact the Property owner prior to such suspension. If the violator fails to comply with a suspension order issued in an emergency, the Authorized Enforcement Agency may take such steps as it deems necessary to prevent or minimize damage to the MS4, or Waters of the State, or to minimize danger to Persons and the public.

#### 7.2 Suspension due to the Detection of Illicit Connections and/or Illicit Discharge

Any Person discharging or connecting to the MS4 in violation of these Rules and Regulations may have their MS4 access terminated if such termination would abate or reduce an Illicit Discharge. The Authorized Enforcement Agency shall notify a property owner or other alleged violator, in writing, of the proposed termination of its MS4 access at least five (5) days prior to such termination, via certified mail and ordinary mail with certificate of mailing to the tax mailing address of the Property Owner. The property owner or other alleged violator may petition the Authorized Enforcement Agency for a reconsideration and hearing pursuant to Section 14 hereof.

A Person commits an offense if the Person reinstates MS4 access to Premises that were otherwise terminated pursuant to this Section 7, without the prior written approval of the Authorized Enforcement Agency.

#### SECTION 8 - INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.

Any Person subject to an Industrial or Construction Activity NPDES Storm Water 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 Authorized Enforcement Agency prior to the allowing of discharges to the MS4.

#### SECTION 9 - MONITORING OF DISCHARGES AND CONNECTIONS.

#### 9.1. Applicability

This section applies to all Premises and facilities that have Storm Water discharges associated with Industrial, Commercial, and Construction Activity.

#### 9.2 Access to Facilities

- A. Facility operators shall permit the Authorized Enforcement Agency to enter and inspect Premises facilities during the hours of 8:00 a.m. to 6:00 p.m., Monday through Saturday, at other reasonable times, as may be warranted and at any time in the event of an emergency, subject to regulation under these Rules and Regulations as often as may be necessary to determine compliance with these Rules and Regulations or to determine whether an MS4 connection or discharge exists. If a discharger has security measures in force which require proper identification and clearance before entry into its Premises, the discharger shall make the necessary arrangements to allow access for representatives of the Authorized Enforcement Agency as required herein.
- B. Facility operators shall allow the Authorized Enforcement Agency ready access to all parts of the Premises for the purposes of inspecting, sampling, surveying, examining and copying of records that must be kept under the conditions of an NPDES permit, or which pertains to discharge Storm Water, in a NPDES regulated or an unregulated facility, and the performance of any additional duties as defined by applicable state and federal law.
- C. Facility operators shall permit the Authorized Enforcement Agency the right to set up on any permitted facility such devices as are necessary in the opinion of the Authorized Enforcement Agency to conduct monitoring and/or sampling of the facility's Storm Water discharge.
- D. The Authorized Enforcement Agency has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be installed and maintained at all times in a safe and proper operating condition by the discharger at the discharger's expense. All devices used to measure Storm Water flow and quality shall be regularly calibrated to ensure their accuracy.
- E. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the Authorized Enforcement Agency and shall not be replaced. The costs of clearing such access shall be borne by the operator of the facility.

- F. Unreasonable delays in allowing the Authorized Enforcement Agency access to a permitted facility is a violation of a Storm Water Discharge Permit and of these Rules and Regulations. A Person who is the operator of a facility which discharges Storm Water associated with Industrial Activity or Construction Activity commits an offense if the Person denies the Authorized Enforcement Agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by these Rules and Regulations.
- G. If the Authorized Enforcement Agency has been refused access to any part of the Premises from which Storm Water is discharged, and the agency is able to demonstrate probable cause to believe that there may be a violation of these Rules and Regulations, or there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with these Rules and Regulations or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the Authorized Enforcement Agency may seek issuance of a search warrant from any court of competent jurisdiction.

# SECTION 10 - REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.

The Authorized Enforcement Agency shall adopt requirements identifying Best Management Practices (BMPs) for any activity, operation, or facility which may cause or contribute to Pollution or contamination of Storm Water, the Storm Drainage System, or Waters of the State. 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 MS4 and Storm Drainage System or Watercourses through the use of these structural and non-structural BMPs. Further, any Person responsible for a property or Premises, which is the source of an Illicit Discharge, shall be required to implement, at said Person's sole cost and expense, additional structural and non-structural BMPs to prevent the further discharge of Pollutants to the MS4. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of Storm Water associated with Industrial Activity and Construction Activity, to the Maximum Extent Practicable, shall be deemed in compliance with the provisions of this section. These BMPs shall be part of the County's Storm Water Prevention Plan (SWPP) as necessary for compliance with requirements of the NPDES permit.

#### SECTION 11 - WATERCOURSE PROTECTION.

Every Person owning or operating property through which a Watercourse passes, or such Person's lessee or vendee, shall keep and maintain that part of the Watercourse within the legal boundaries of the property and areas adjacent to the Watercourse within such Person's direct control, free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard or hinder the flow of water through the Watercourse. In

addition, the owner, operator, or other person in control of the Premises, shall maintain existing privately owned (either permanent or temporary) structures, buildings, and improvements within or adjacent to a Watercourse, so that such structures, buildings or improvements will not become a hazard to the use, function, or physical integrity of the Watercourse.

#### **SECTION 12 - NOTIFICATION OF SPILLS.**

Notwithstanding other requirements of law, as soon as any Person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in Illegal Discharges or Pollutants discharging into Storm Water, the Storm Drainage System, MS4, or Waters of the State, said Person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release to protect the health, safety and welfare of the public and to mitigate any damage to the environment and the MS4.

In the event of such a release of hazardous materials said Person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services (9-1-1) and the Authorized Enforcement Agency via telephone or facsimile. Emergency response agencies shall include without limitation, local fire department, Butler County Emergency Management Agency, and the Ohio Environmental Protection Agency. Such notification in no way alleviates other federal, state, or local reporting obligations imposed by law.

In the event of a release of non-hazardous materials, said Person shall notify the Authorized Enforcement Agency in person or by telephone or facsimile no later than the next business day after the date of said incident. Notifications in person or by phone shall be confirmed by written notice from the Person responsible for such known or suspected release addressed and mailed to the Authorized Enforcement Agency within three business days of the telephone or in person notice.

If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years by the owner. Upon the request of the Authorized Enforcement Agency, copies of such records shall be provided to the agency, at the expense of the owner/operator.

The Authorized Enforcement Agency, if other than the BCSWD, shall provide reports required of property owners hereunder to the BCSWD within fourteen (14) calendar days of the agency's receipt.

The Authorized Enforcement Agency, if other than the BCSWD, shall provide periodic reports to the BCSWD, in a format determined by the BCSWD, and with sufficient detail to support the jurisdiction's compliance with the Ohio Environmental Protection Agency National Pollutant Discharge Elimination System General Permit for Small Municipal Separate Storm Sewer Systems.

Unless a Local Jurisdiction has designated its enforcement obligations to the BCSWD hereunder, compliance with the permit enforcement and reporting obligations in this Section 12 shall be the responsibility of the Local Jurisdiction.

#### **SECTION 13 - ENFORCEMENT.**

#### 13.1 Notice of Violation

Whenever the Authorized Enforcement Agency determines that a Person has violated a prohibition or failed to meet a requirement of these Rules and Regulations, the Authorized Enforcement Agency may order compliance by written notice of violation to the responsible Person. The notice shall state and describe the violation and may require, without limitation:

- A. The performance of monitoring, analyses, and reporting;
- B. The elimination of Illicit Connections or Illicit Discharges;
- C. That violating discharges, practices, or operations shall immediately cease and desist;
- D. The abatement or remediation of Storm Water Pollution or contamination hazards and the restoration of any affected property;
- E. Payment of a fee to recover administrative and/or remediation costs incurred by Authorized Enforcement Agency for such violation per ORC 6117.012 (D) and as otherwise permitted by law; and
- F. The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation, abatement or restoration shall be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the total cost and expense thereof shall be charged to the violator, as permitted by applicable law, or pursuant to an order from a court of competent jurisdiction.

#### SECTION 14 - APPEAL OF NOTICE OF VIOLATION.

#### 14.1 Notice of Appeal

Any Person receiving a notice of violation as described in Section 14 hereof, may appeal the determination of the Authorized Enforcement Agency. The notice of appeal must be received by the Authorized Enforcement Agency within twenty (20) calendar days from the date of the notice of violation. Hearing on the appeal before the appropriate authority or its designee shall take

place within twenty (20) calendar days from the date of the Authorized Enforcement Agency's receipt of the notice of appeal.

#### 14.2 Board of Appeals

A. The Authorized Enforcement Agency shall appoint a Board of Appeals, which shall consist of at least three (3) members, all of whom shall be residents of Butler County. The term of all members shall be of such length, and so arranged, that the term of at least one (1) member, but not all members, will expire each year. Each member shall serve until his successor is appointed and qualified. Members shall be removed for the same causes and in the same manner as provided by the board's rules and regulations. Vacancies of the Board of Appeals shall be filled by the Butler County Board of Commissioners, and shall be for the current unexpired term.

For purposes of these Rules and Regulations, the Board of Appeals shall follow and adhere to the organizational procedures and requirements set forth herein, relating to voting rights and percentages, quorums, notices and similar matters. Except as set forth herein, the Board of Appeals shall follow the procedures outlined in its internal policies and any prior or subsequent Resolutions related to such matters.

- B. Organization. The Board of Appeals shall elect its own officers annually, and shall adopt the procedural rules necessary to the conduct of its affairs. Meetings shall be held at the call of the chairperson, and within the described timeframe set forth in Subsection A of this Section 14, and at such other times as the Board may determine. A majority of the members of the Board of Appeals shall constitute a quorum for the conducting of business.
- C. The chairperson, or in his absence, the acting chairperson, may administer oaths, and compel the attendance of witnesses and production of documents. All meetings and records shall be open to the public.
- D. Official Action. The Board of Appeals shall act by resolution or motion, on which a majority of fifty-one percent (51%) of the total number of members must concur, and shall keep minutes of its proceedings. The minutes shall show the vote of each member upon each question, or if absent or failing to vote, indicating such facts, and a statement of the facts of each appeal considered by the Board, and the Section of these Rules and Regulations, where applicable, which the Board has considered in approving or disapproving any petition, appeal, or other matter brought before the Board. All Persons appearing before the Board shall be sworn before giving testimony.
- E. Right of Petition or Appeal. An appeal of a ruling of the enforcement officer of the Authorized Enforcement Agency shall stay all proceedings, unless the

enforcement officer certifies that, by reason of facts pertaining to the matter in question, a stay, in his opinion, would cause eminent peril to life and/or property. In the event such certification is made by the enforcement officer, proceedings shall not be stayed, except by a restraining order granted by the Butler County Court of Common Pleas. The Board of Appeals, by an affirmative vote of at least fifty-one percent (51%) of its members shall decide the matter before it, and the Board's decisions shall be final. Any appeal of the Board of Appeal's decision shall be in the Butler County Court of Common Pleas, pursuant to Ohio Revised Code, Section 2506.01 et. seq.

- F. Hearings. The Board of Appeals shall fix a reasonable time for the hearing of any petition or appeal. The Board shall provide at least fifteen (15) calendar days' prior notice of the time and place of such hearing, and such notices shall be provided to the enforcement officer, the petitioner or appellant, and to the owners of records of real property within five hundred feet (500') of the premises in question. Such notice shall be delivered personally, or by regular U.S. Mail, addressed to the respective owners at the address given on the last assessment role, and by one (1) publication in one (1) or more newspapers of general circulation within the County. Notice by publication shall occur at least five (5), but not more than ten (10) calendar days prior to the hearing date. In the event a hearing is continued, the Board may, but is not required to readvertise or resend notices. Any party may appear at such hearing in person, by agent, or by attorney. The Board shall decide the petition or appeal within a reasonable time, not to exceed fifteen (15) calendar days after conclusion of the appeal hearing.
- G. Powers and Duties. The Board of Appeals shall have all the appropriate powers and duties prescribed by law, and by these Rules and Regulations. The Board shall have the following duties and powers:
  - (1) Administrative Review. To hear and decide appeals only in such cases where it is alleged that there is an error in any order, requirement, decision, or determination made by the Authorized Enforcement Agency in the enforcement of these Rules and Regulations. Such appeal must be made as provided for in the first paragraph of this Section 14. The concurring vote of at least a majority equal to fifty-one percent (51%) of the total number of members of the Board of Appeals shall be necessary to reverse any order, requirement, decision, or determination of the enforcement officer, or to decide in favor of the petitioner or applicant on any matter upon which the Board of Appeals is required to make a decision under these Rules and Regulations.
  - (2) Variances. No variances relating to the enforcement or requirements of these Rules and Regulations shall be granted by the Board of Appeals and no such authority to grant variances is contained herein.

H. Effective Date. The Board of Appeals shall make specific finding of fact upon which it bases its order or decision. The Board of Appeals' order or decision shall become effective upon final determination of the issue by the Board of Appeals as described herein. Written notification of the Board's decision shall be provided to the petitioner or appellant within ten (10) calendar days of the Board's final determination on the issue. The effective date of the Board's Decision shall be the date of the hearing at which the final determination was made, unless otherwise identified in the notice of the Board's determination.

#### SECTION 15 - ENFORCEMENT MEASURES AFTER APPEAL.

If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, no later than twenty (20) calendar days after the decision of the Board of Appeals upholding the decision of the Authorized Enforcement Agency, then representatives of the Authorized Enforcement Agency may, as permitted by applicable law or pursuant to an order from a court of competent jurisdiction, enter upon the subject Premises and take any and all measures necessary to abate the violation and/or restore the Premises. Written notice shall be provided to the owners of the Premises at least seventy-two (72) hours prior to entry upon the Premises by the Authorized Enforcement Agency. If the operator of the premises is not the owner, the Authorized Enforcement Agency shall make reasonable efforts to notify the operator of the property at the time of notice to the owner. It shall be a violation of the Rules and Regulations and unlawful per Ohio Revised Code, Section 6117.99 for any Person, owner, agent or Person in possession of any Premises to refuse to allow the Authorized Enforcement Agency or its designated contractor to enter upon the Premises for the purposes set forth above.

#### SECTION 16 - COST OF ABATEMENT OF THE VIOLATION.

Within sixty (60) calendar days after abatement of the violation by the Authorized Enforcement Agency, the owner of the property/Premises will be notified of the cost of such abatement, including administrative costs. The property owner may file a written protest to the Authorized Enforcement Agency objecting to the invoiced amount of the abatement cost within twenty (20) calendar days of the date of such notice. Within fourteen (14) calendar days of receiving the written protest, the Authorized Enforcement Agency shall issue a written decision either granting or denying the objection in whole or in part. If the amount due is not paid within a timely manner as determined by the decision of the Authorized Enforcement Agency or by the expiration of the time in which to file an appeal pursuant to Paragraph 15A of these Rules and Regulations, the charges shall become a special assessment against the Premises and shall constitute a lien on the Premises for the amount of the abatement.

Any Person violating any of the provisions of this Section shall become liable to the Butler County Storm Water District by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the highest rate of statutory interest permitted under Ohio Revised Code, Sections 1343 and 5703.04 and 6117.01.2, shall be assessed on the balance due and owing beginning on the first (1<sup>st</sup>) day following the requested date of payment.

#### **SECTION 17 - INJUNCTIVE RELIEF.**

It shall be unlawful for any Person to violate any provision or fail to comply with any of the requirements of these Rules and Regulations. In addition to seeking civil and/or criminal penalties and/or, damages, if a Person has violated or continues to violate the provisions of these Rules and Regulations, the Authorized Enforcement Agency may petition a court of competent jurisdiction for a preliminary or permanent injunction restraining or enjoining the Person from activities which would create continued or additional violations and/or compelling the Person to perform abatement or remediation of the violation, in addition to any other relief or awards the court determines to be just.

#### **SECTION 18 - AMELIORATIVE ACTION.**

In lieu of enforcement proceedings, penalties, and remedies authorized by these Rules and Regulations, the Authorized Enforcement Agency may impose upon a violator alternative ameliorative action(s), such as storm drain stenciling, attendance at compliance workshops, creek cleanup, or similar measures.

#### SECTION 19 - VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of these Rules and Regulations is a threat to public health, safety, and welfare, and is declared and deemed a public nuisance, and may be abated or restored by the Authorized Enforcement Agency, other appropriate agency or authority or the violator, at the violator's sole cost and expense pursuant to provisions hereof. In addition, a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be prosecuted to the extent available under applicable law, rule or regulation.

#### **SECTION 20 - CRIMINAL PROSECUTION.**

Any Person that has violated or continues to violate these Rules and Regulations may be liable to criminal prosecution to the fullest extent of the law, and may be subject to a criminal penalty for a minor misdemeanor as established herein and pursuant to Ohio Revised Code, Section 6117.99.

#### **SECTION 21 - ADDITIONAL REMEDIES.**

The Authorized Enforcement Agency may recover all attorney fees, court costs, filing fees, consultant fees and all other expenses associated with enforcement of these Rules and Regulations including, without limitation sampling, testing and monitoring expenses.

#### **SECTION 22 - REMEDIES NOT EXCLUSIVE.**

The remedies listed in these Rules and Regulations are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the Authorized Enforcement Agency to seek cumulative remedies.

### SECTION 23 - COMPLIANCE DOES NOT AFFECT COMPLIANCE WITH OTHER LAWS

Compliance with these Regulations does not affect compliance with other laws. The standards, duties, and obligations set forth in these Rules and Regulations constitute minimum standards. Neither compliance or noncompliance with these Rules and Regulations nor any action or inaction by the Authorized Enforcement Agency shall be construed as any of the following:

- A. Authorizing the discharge of Pollutants or contaminants otherwise prohibited under other applicable laws, rules, and regulations
- B. Relieving any Person from complying with any other applicable state and/or federal laws, rules, or regulations that may address illicit discharges, hazardous spills and/or discharges or releases of any Pollutant or contaminant
- C. Relieving any Person from responsibility for injury or damage to any person or property.

Furthermore, the same shall not impose any liability on the County, any Local Jurisdiction in the BCSWD, or their respective officers, agents and employees for such injury or damage.

#### SECTION 24 - ADOPTION OF RULES AND REGULATIONS.

These Rules and Regulations shall be in full force and effect upon final passage and adoption and at the earliest time permitted by law.

PASSED AND ADOPTED this 12th day of November, 2009, by the following vote:

By:	
Donald L. Dixon, President	
By: Lee Jeleeth	
Gregory V. Johnvette, Vice-President	
By: Charles R. Furmon	,
Charles R. Furmon, Member	

# Appendix C Article VII of Butler County Subdivision Regulations (Construction Site Runoff Control Requirements)



#### ARTICLE VII

#### SOIL AND WATER MANAGEMENT STANDARDS

#### SECTION 7.01 GENERAL STATEMENT

These regulations establish technically feasible and economically reasonable standards to achieve a level of subdivision design and construction to minimize damage to property, degradation of natural resources, and to promote and maintain the health, safety and general well-being of all life and inhabitants of Butler County. Further, these regulations:

- A. Promote development while keeping downstream flooding, erosion and sedimentation at existing levels;
- B. Reduce damage to receiving streams and drainage systems which may be caused by impairment of their capacity which may be caused by sedimentation.

#### SECTION 7.02 PERFORMANCE STANDARDS

#### A. Permit Required

(1) Owner/operator must obtain a Butler County Earth Moving Permit with construction drawing approval from the Butler County Storm Water District before any Earth Disturbing Activity may begin, including clearing, grubbing, and cut/fill activity unless the proposed project is regulated by Section 5.01, Lot Erosion and Sediment Control permit. All projects that have one acre or more of disturbance must have either an Earth Moving Permit or a Lot Erosion and Sediment Control Permit.

#### B. Erosion and Sediment Control

- (1) To the maximum extent practicable, having all ESC's from the approved construction drawings installed and functioning, Erosion and Sediment is to be kept on Development Area. Erosion and sedimentation caused by storm water runoff over the Development Area due to Earth Disturbing Activities shall be stabilized and confined to within the boundaries of the Development Area.
- C. Storm Water Discharges.
  - (1) The Butler County Storm Water District has defined allowable storm water discharges per its NPDES Phase II Permit as described in *its* <u>Illicit Discharge Detection and</u> <u>Elimination Regulations</u>.
- D. Structural and Nonstructural Soil and Water Management
  - (1) Non-structural and Structural Controls shall be designed in accordance with

requirements and standards specified in these regulations and/or the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES).

- (2) Permanent Structural and Non-structural Controls shall be placed in easements and recorded on the subdivision record plat and/or property deeds on which they are located and shall remain unaltered unless first approved by the Butler County Engineers Office. See Article VIII Subdivision Plat Requirements.
- (3) In designing Structural Controls, access, storage volume, flood prevention and water quality benefits shall be considered to the maximum extent practicable to protect life and property. Refer to Article V for additional design criteria.

#### E. Channel Protection

- (1) The Owner/Operator will protect channels from degradation due to water run-off. Structural or Non-structural Controls shall be constructed by the Owner/Operator as prescribed in the latest edition of <u>Rainwater and Land Development</u> and/or <u>ODOT Location & Design Manual.</u>
- (2) The design and installation of any storm water Channel shall comply with <u>Article V of</u> these regulations.

#### F. Unsuitable Soils

- (1) When a soil with a high water table, as defined in the Butler County Soil Survey, is present, a note must be placed by the designing engineer on the final plat stating: "High water table soils are apparent in this area. If basements are constructed, it is the responsibility of the builder to take special precautions to ensure the basement stays dry." If this note is not on the plans as the Butler Soil and Water Conservation District is reviewing the plans, revisions will be required with the note before the plans will be approved.
- (2) Upon review of the construction drawings by Butler Soil and Water Conservation District, if soil type and/or severity of slopes require additional testing as determined by the Butler Soil and Water Conservation District, a report from a State Registered geotechnical engineer will be required. The report results of surface and subsurface exploration, conditions of the land, procedures for performing the grading operations, maximum slope to satisfy stability, and other geotechnical design requirements for the requested lots will determine if there are problematic conditions to overcome, what those problematic conditions may be, and possible solutions to overcome them to protect the home buyer. This report must be received and checked by the Butler Soil and Water Conservation District so that the conclusions appear reasonable and credible prior to construction drawing approval. The results of this report may warrant additional studies prior to the building permit being issued due to building code

requirements.

Vegetation

winter.

stockpiles, that will be dormant for

more than 21 days but less than one

Disturbed areas that will be idle over

- (3) If a hydric soil or soils with hydric components, wetland vegetation and/or possible hydrologic conditions are present, Butler Soil and Water Conservation District may require a wetland delineation study be done. A note shall be placed on the preliminary plat stating, "A wetland delineation study shall be complete for the necessary lots prior to construction drawing approval." The delineated wetland boundaries shall be shown on the construction drawings, final plat and included within an easement on the property.
- G. Temporary Soil Stabilization of Development Area due to Earth Disturbing Activity and Soil Stockpiles
  - (1) Temporary Vegetation shall be established within Development Areas subject to Earth Disturbing Activities as specified in Table 1.

**Area requiring Temporary Time frame to apply Temporary Vegetation** Any disturbed areas within 50 feet of Within 2 days of the most recent disturbance if that area will remain idle for more than 21 a Stream and not at final grade. days. For all construction activities within Disturbed Area, including soil Within 7 days of the most recent disturbance

Prior to onset of winter weather.

**Table 1: Temporary Soil Stabilization** 

(2) Soil stabilization measures should be appropriate for the time of year, Development Area conditions, and estimated time of use. Stabilization methods include vegetation, mulching, and the early application of gravel base on areas to be paved.

within the area.

- (3) Topsoil to be stored on Development Area shall be stabilized with quick growing plants or other means, so that it is protected from wind and water erosion. Topsoil to be redistributed on project site shall be maintained in a usable condition for sustaining vegetation and reused on the Development Area.
- H. Permanent Soil Stabilization of Development Area due to Earth Disturbing Activity
  - (1) Permanent Vegetation shall be established on Development Areas as specified in Table 2.

**Table 2: Permanent Soil Stabilization** 

Area requiring Permanent Vegetation	Time frame to apply Permanent Vegetation
Any area that will lie dormant for 6 months or more.	Within 7 days of the most recent disturbance.
Any area at final grade.	Within 7 days of reaching final grade within that area.

(2) Permanent vegetation shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion.

# I. Cut And Fill Slopes

- (1) Cut and fill slopes shall be designed, constructed, and stabilized in a manner which will minimize erosion. Consideration should be given to the length and steepness of the slope, the soil type, upslope drainage area, groundwater conditions, and other applicable factors. If, after final grading, there is excessive erosion, where rill erosion becomes gully erosion, additional slope stabilizing measures by the owner, developer, or builder will be required until the problem is corrected. The following guidelines are provided to aid in developing an adequate design.
  - C. Roughened soil surfaces are generally preferred to smooth surfaces on slopes.
  - D. Diversions should be constructed at the top of long steep slopes which have significant drainage areas above the slope. Diversions or terraces may also be used to reduce slope length.
  - E. Concentrated storm water should not be allowed to flow down cut or fill slopes unless contained within an adequate channel, flume or slope drain structure.
  - F. Wherever a slope face crosses a water seepage plane which endangers the stability of the slope, adequate drainage or other protection should be provided.
  - G. Fills of five (5) or more feet located at the proposed primary structure location and 10 feet around the perimeter of the proposed primary structure should be compacted to densities not less than 98 percent of the Standard Proctor maximum Dry Density, ASTM D698. All other fill should be compacted to at least 95 percent Standard Proctor Dry Density ASTM D698. Compaction test results shall be submitted and approved by the Butler Soil and Water Conservation District prior to final plat approval.

# J. Protection Of Adjacent Properties/Public Right-of-Ways

(1) Properties, public right-of-ways, and thoroughfares adjacent to the Development Area of an earth disturbing activity shall be protected from sediment deposition. This may be accomplished by preserving a well-vegetated Buffer at the perimeter of the Development Area; by installing perimeter controls such as sediment barriers, filters, dikes, sediment basins; or by a combination of such measures.

# K. Erosion & Sediment Control's (ESC's)

- (1) ESC's shall be used to control erosion and trap sediment on a Development Area remaining disturbed for more than 14 days. Such structures may include, but are not limited to, silt fences, mulch berms, storm drain inlet protection, sediment traps, sediment basins, and diversions or channels which direct runoff to a sediment basin. All ESC's must be installed to function as their designed intent.
- (2) ESC's shall be constructed as a first step in grading and be made functional before upslope Earth Disturbing Activities take place. Earthen ESC's such as dams, dikes, and diversions shall be seeded and mulched as soon as the installation is complete. ESC's shall be functional throughout the course of Earth Disturbing Activity and until the Development Area is stabilized with Permanent Vegetation.
- (3) Sheet flow runoff from the Development Area shall be intercepted by silt fence, mulch berms or diversions. Silt fence or mulch berms shall be placed on a level contour and shall be capable of temporarily ponding runoff. As a guideline, the relationship between the maximum slope lengths above silt fence for a particular slope range is shown in Table 3 below or a plan of design from a professional engineer may be submitted, whichever is more appropriate.

**Table 3: Maximum Slope Length Above Silt Fence** 

# Drainage Area:

Maximum Slope Length Above Silt Fence			
Slope		Slope Length (ft.)	
0% - 2%	Flatter than 50:1	250	
2% - 10%	50:1 - 10:1	125	
10% - 20%	10:1 - 5:1	100	
20% - 33%	5:1 - 3:1	75	
33% - 50%	3:1 - 2:1	50	
> 50%	> 2:1	25	

Note: For larger drainage areas, see standards for temporary diversions, sediment traps and sediment basins.

- (4) Storm water diversion practices shall be used to keep runoff away from disturbed areas and steep slopes. Such devices, which include swales, dikes, or berms, may receive storm water runoff from areas up to 10 acres.
- (5) Whenever storm water detention is required per Article V, the storm water runoff from the Development Area shall pass through a sediment basin or other suitable sediment trapping facility before discharge to Waters of the State. The Butler County Storm Water District may require sediment basins or traps for smaller disturbed areas where deemed necessary due to Development Area challenges or issues that are not controllable with standards set forth within these regulations.

# L. Stabilization Of Waterways And Outlets

- (1) All on-site, man-made storm water conveyance channels shall be designed and constructed to withstand the expected velocity of flow without erosion as described in Article V. Conveyance channels are to be seeded and mulched within 14 days of completion. Methods adequate to prevent erosion shall also be provided at the outlets of all pipes and paved channels. Outlet will be stabilized with rock rip rap and/or other energy dissipation devices as approved by the Butler County Storm Water District.
- (2) Channel design and preventative scour measures to prevent erosion are to be designed per Article V.

# M. Storm Sewer Inlet Protection

- (1) All storm sewer inlets shall be protected so that sediment-laden water will not enter the conveyance system without first being filtered or otherwise treated to remove sediment. A rolled tile wrapped inlet sediment filter shall be used for all curb inlet protection or equivalent BMP.
  - a. Working In Or Crossing Watercourses
- (2) All activities shall be kept out of watercourses to the maximum extent possible. Where in-channel work is necessary, precautions shall be taken to stabilize the work area during construction to minimize erosion. The channel (including bed and banks) shall be restored to its original cross-section and all disturbed area stabilized immediately after in-channel work is completed.
- (3) Where a watercourse will be crossed regularly during construction, a temporary Stream crossing shall be constructed per specifications of the U.S. Army Corps of Engineers and the latest edition of the <u>Rainwater and Land Development Manual</u>. The Stream crossing will be used for the shortest period possible to complete the work, removed following Development Area construction, and restored as described in Section 2.12 (a) above.

# N. Maintenance and Removal Of Temporary Measures

- (1) All temporary erosion and sediment control practices shall be maintained and repaired by the Owner/Operator to assure continued performance.
- (2) All temporary erosion and sediment control measures shall be removed within thirty (30) days after final Development Area stabilization is achieved or after the temporary measures are no longer needed. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall have the final grade re-established and be permanently stabilized to prevent further erosion and sedimentation.

# O. Control Of Construction Development Area Debris and Wastes

- (1) All owners, applicants, contractors, and developers shall properly dispose of discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste on the Development Area in order to keep streets and gutters clear of all sediment and debris from the Development Area. Any burial pits on site must be shown on the final plat.
- (2) A defined washout area shall be located within the Development Area and protected such that washout does not leave the area. Proper removal and disposal of the material shall take place upon hardening or drying.
- P. Use, Safety, and Maintenance of Storm water / Erosion Control Practices
  - (1) Storm water management practices shall be designed for the permitted use of the Development Area and function safely and with minimal maintenance.
  - (2) If an inspection reveals that a control practice is in need of repair or maintenance because it is failing, with the exception of a sediment settling pond, it must be repaired or maintained within three days of the inspection by Owner/Operator. Sediment settling ponds must be repaired or maintained to the approved construction drawings within 10 days of the inspection Owner/Operator.

# Q. Inspection of Storm Water Controls/ Internal Inspections

- (1) Development Area discharge locations shall be inspected to ascertain whether erosion and sediment control measures are effective in preventing significant impacts to the maximum extent practicable to the receiving Waters of the State.
- (2) All controls on the Development Area shall be inspected at least once every seven calendar days and within 24 hours after any storm event greater than one-half inch of rain per 24 hour period and repaired or maintained as described in Section 2.17 above. The Development Area Owner/Operator shall assign a qualified inspection personnel, experienced in the installation and maintenance of erosion and runoff controls, to conduct these inspections to ensure that all storm water control

- practices are functional, that all provisions of the SWP3 and this regulation are being met, and whether additional control measures are required.
- (3) All ESC's shall be periodically inspected by the developer to ensure proper function and to identify failures. If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment settling pond, it must be repaired or maintained within three (3) days of the initial inspection. Sediment settling ponds must be repaired or maintained within 10 days of the inspection.
- (4) The Development Area Owner/Operator shall maintain for three (3) years following the final stabilization of the Development Area a record summarizing inspections, names(s) and qualifications of personnel making the inspections, the date(s) of inspections, major observations relating to the implementation of the SWP3, a certification as to whether the Development Area is in compliance with the SWP3, and identification of any incidents of non-compliance.

# R. Accessibility and Easements

i. All permanent storm water management measures shall have easements sufficient to cover the facility and to provide access for inspection and maintenance. See Articles V and VIII for additional information.

# S. General Standards

(1) The standards identified in this Section are general guidelines. Each application shall be reviewed on a case by case basis and some may require additional and more stringent requirements, while others may have individual requirements waived by the authorized agent.

# SECTION 7.03 STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS

- A. Storm Water Pollution Prevention Plans (SWP3s) are intended to provide information on all soil erosion and runoff control activities and Best Management Practices (BMPs) to be used and incorporated on the Development Area both <u>during</u> and <u>after</u> Development Area development. This information includes, but is not limited to, Development Area grading, storm water management facilities and practices, erosion and runoff control information, maintenance plans, and other measures that focus on managing the effects of Earth Disturbing Activities on the Development Area.
- B. Each SWP3 shall provide Development Area designs that meet the Performance Standards presented in Section III and provide practical treatment for both water quality and quantity of storm water from the Development Area as appropriate.

# C. In general, SWP3s need to address:

- (1) <u>Erosion and Sediment Control</u>. Providing measures that endeavor to ensure that Earth Disturbing Activities at the Development Area <u>during</u> and <u>after</u> development will be managed in a manner that will not increase erosion and sedimentation, to the maximum extent practicable, from the Development Area, resulting in impacts to water quality and that the Performance Standards specified in Section II are met.
- (2) <u>Runoff Control</u>. Providing measures to ensure that the rate of surface water runoff from the Development Area during and after construction will not exceed predevelopment conditions and that meet the Performance Standards specified in Section II.
- D. The SWP3 shall specifically include all the following:
  - 1. A Development Area Plan Map that shows the location of existing features and proposed improvements on the Development Area including:
    - a. Total area of the Development Area and the area of the Development Area that is expected to be disturbed (i.e. grubbing, clearing, excavation, filling or grading, including off-site borrow areas).
    - b. Known surface water locations, including springs, wetlands, Streams, lakes, water wells, etc., on or within 50 feet of the Development Area, including the boundaries of known wetlands or Stream channels and first subsequent named receiving water(s) the Owner/Operator intends to fill or relocate for which the Owner/Operator is seeking approval from the Army Corps of Engineers and/or Ohio EPA.
    - c. The general directions of surface water flow and 100-year floodplain when applicable.
    - d. All proposed improvements, including buildings, retaining walls, sidewalks, streets, parking lots, driveways, utilities and storm water basins, drainage impoundments, channels and outlets, etc.
    - e. Appropriate soil information for the Development Area describing locations of bedrock, unstable or highly erodible soils as determined by the Butler County Soil Survey, and/or soil tests. Show location of any soil test borings on plan. Other soils information such as permeability, high water table, etc. may be mentioned.
    - f. If required by preliminary plat approval the geotechnical study must be completed and approved at the SWP3 review step.
    - g. An estimate of the impervious area and percent imperviousness created by the Earth Disturbing Activity.
  - ii. The contents of the SWP3 required by the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES) and incorporated here by reference. This Plan may be submitted as developed for the Ohio EPA, in conjunction with the other requirements of Subsection 5.04. The contents of the Ohio EPA's SWP3 include, but are not limited to:

- a. A description of current land uses at the Development Area.
- b. Existing data describing if available, the quality of any discharge from the Development Area.
- c. Appropriate soil information for the Development Area describing locations of bedrock, unstable, or highly erodible soils as determined by the Butler County Soil Survey and/or soil tests. Show location of any soil test borings on plan. Other soils information such as permeability, perched water table, etc. may be mentioned.
- d. A determination of runoff coefficients or curve numbers for both the preconstruction and post construction Development Area conditions.
- e. For all Earth Disturbing Activities (involving the disturbance of five or more acres of land or will disturb less than five acres, but part of a larger common plan of development or sale which will disturb five or more acres of land), a description of post construction BMP(s) chosen and designed to detain and treat a water quality volume (WQv) equivalent to the volume of runoff from a 0.75-inch rainfall (See Ohio EPA Construction Activity Permit for methodology). Design of water quality volume within detention / retention facilities must comply with Article V.
- f. For all small Earth Disturbing Activities (which disturb one or more, but less than five acres of land and is not a part of a larger common plan of development or sale which will disturb five or more acres of land), a description of measures that will be installed during the development process to control pollutants in storm water discharges that will occur after construction operations have been completed.
- g. An implementation schedule which describes the sequence of major construction operations (i.e., grubbing, excavating, grading, utilities and infrastructure installation) and the implementation of erosion, sediment, and storm water management practices or facilities to be employed during each operation of the sequence.
- h. For subdivided developments where the SWP3 does not call for a centralized sediment control capable of controlling multiple individual lots, a detail drawing of a typical individual lot showing standard individual lot erosion and sediment control practices according to Section V.
- i. A detailed description of the storm water controls to be incorporated and how these meet or exceed the appropriate Performance Standards presented in Section II. This shall include the identification of which entity (developer, contractor, owner, etc.) is responsible for implementation of each individual control (e.g., contractor A will clear land and install perimeter controls and

contractor B will maintain perimeter controls until final stabilization).

j. A detailed maintenance plan that describes procedures (e.g. inspections- see section <u>2.18 Inspection of Storm Water Controls/ Internal Inspections</u>) needed to ensure the continued performance of control practices shall be located at the entrance of the Development Area or at the job trailer in a well marked container accessible at all times. Such plans must ensure that pollutants collected within structural post-construction practices, be disposed of in accordance with local, state, and federal regulations.

# E. Development Area Map that includes:

- (1) Limits of Earth Disturbing Activity of the Development Area including associated off-site borrow or spoil areas.
- (2) Soil types on the Development Area, including locations of unstable or highly erodible soils.
- (3) Existing and proposed 2 foot contours. A delineation of drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed, in acres.
- (4) Existing and planned locations of buildings, roads, parking facilities and utilities.
- (5) The location of all erosion and sediment control practices, including areas likely to require temporary stabilization during development of the Development Area.
- (6) Sediment and storm water management basins noting their sediment settling volume and contributing drainage area.
- (7) Permanent storm water management practices to be used to control pollutants in storm water after construction operations have been completed.
- (8) Areas designated for the storage or disposal of solid, sanitary, and toxic wastes, including dumpster areas, cement truck washout areas, and vehicle fueling and maintenance.
- (9) The location of designated construction entrances where vehicles will access the Development Area.
- (10) The location of any in-Stream activities, including Stream crossings.
- F. Copies of pertinent Notices of Intent (NOI), permits, public notices and letters of authorization must be included with SWP3 submissions. These may include, but are not limited to, Ohio EPA NPDES Permit authorizing storm water discharges associated with construction activity, Ohio EPA Phase II Storm Water Permits, Section 401 and 404 Clean Water Act Permits, Ohio EPA Isolated Wetland Permit, and Ohio Dam Safety Law Permits.
- G. Supplemental requirements as provided in Subsection 3.06.
- H. Storm water discharge to critical areas with sensitive resources (i.e. wetlands, steep slopes, scenic river designation, recharge areas, etc.) may be subject to additional criteria or may need to utilize or restrict certain storm water practices to protect these critical areas with sensitive resources and functions.

- I. Supplemental Requirements
  - 1. Determination of Construction Development Runoff
    - a. Each Development Area Management Plan shall include an evaluation of predevelopment conditions together with construction conditions that quantifies the volume and rate of runoff from the Development Area by subdrainage areas. This evaluation shall be prepared according to methods prescribed in the latest edition of <u>Rainwater and Land Development Manual</u> or other appropriate sources. The evaluation shall:
      - 1. Show delineation and sequence of subdrainage units which comprise the area proposed for development.
      - 2. Indicate the hydraulic length of slope per individual subdrainage unit and the length of the natural or manmade watercourse which accommodates the surface runoff from each subdrainage unit.
      - 3. Indicate within the legend the average percent slope, erosion factor (K), and runoff curve number (CN) per individual subdrainage unit for a 24-hour storm of a one-year frequency.
- J. Storm Water Pollution Prevention Plan Submission, Review and Action
  - (1) Submission of the Storm Water Pollution Prevention Plan may be included in the improvement plan review process as stated in Section 3.13 of the Butler County Subdivision Regulations which initiates the review process. An Erosion and Sediment Control Butler County Earth Moving Permit application must be completed with all of the applicable fields filled in and attached to the improvement plan along with the appropriate fee.
  - (2) The SWP3 shall be reviewed by the Butler County Storm Water District to:
    - a. Verify background information furnished by the applicant and evaluate the proposed development in relation to existing Development Area conditions.
    - b. Assess the SWP3 in relation to the Performance Standards and requirements of this resolution.
  - (3) Upon submission of the complete SWP3 and the ESC Earth Moving Permit application to the Butler County Storm Water District, it shall be reviewed within 14 calendar days. If the review is not completed within 14 calendar days, the applicant may contact the Butler County Storm Water District to set the preconstruction meeting. The review will be finished at the time of the preconstruction meeting and, if any revisions are needed, they will be discussed at the preconstruction meeting. If no other approvals for the improvement plans are needed from other county agencies, then the developer/applicant may set up a preconstruction meeting with Butler County Storm Water District.

- (4) With Butler County Storm Water District approval, the developer may opt to submit a preliminary ESC plan directly to Butler County Storm Water District with completed application. This option assumes the applicant shall have a completed (final) ESC plan by the time construction drawings are submitted to the Department of Development and Planning.
- (5) The Butler County Storm Water District shall either:
  - a. Approve the SWP3 as submitted by the applicant; or
  - b. Conditionally approve the SWP3 and require the submission of additional and/or revised information by the applicant, in order to fully meet the intent and standards of this resolution; or
  - c. Disapprove the SWP3.
- (6) Revisions to conditionally approved SWP3s shall be prepared and submitted by the applicant to the Butler County Storm Water District for review.
- (7) Once the SWP3 plans are approved and a preconstruction meeting is held between the Butler County Storm Water District and the earth moving contractor or other appropriate party involved with the project, approval of the Earth Moving Permit will be granted.

# SECTION 7.04 COMPLIANCE RESPONSIBILTY

- A. Butler County Board of Commissioners hereby designate Butler County Storm Water District as its duly authorized representative for the purposes of enforcement activity permitted by O.R.C. 307.79
- B. Performance Liability and Responsibility
  - (1) No provision of this resolution shall limit, increase, or otherwise affect the liabilities of the applicant nor impose any liability upon Butler County not otherwise imposed by law.
  - (2) The applicant is responsible for carrying out all provisions of the approved Storm Water Pollution Prevention Plan and for meeting all the standards and requirements of this regulation.
- C. No Release From Other Requirements
  - (1) No condition of this permit shall release the applicant from any responsibility or requirements under other federal, state, or local environmental regulations. If requirements vary, the most restrictive requirement shall prevail.

# D. Violations

- (1) Earth moving activities regulated under this regulation shall not begin until the Butler County Earth Moving permit is granted as spelled out in Article VII Section 3.07 and all necessary state and federal permits and appropriate approvals of Storm water Pollution Prevention Plans have been granted to the Development Area owner/applicant.
- (2) No person shall violate or cause or knowingly permit to be violated any of the provisions of this resolution, or fail to comply with any of its provisions or with any lawful requirements of any public authority made pursuant to it, or knowingly use or cause or permit the use of any lands in violation of this resolution or in violation of any approval permit granted under this resolution.

# E. Enforcement & Penalties

- (1) All Development Areas are subject to inspections by the Butler County Storm Water District to ensure compliance with the approved SWP3.
- (2) After each inspection, a status report shall be prepared and distributed to the appropriate person(s).
- (3) If it is found that the operations are being conducted in violation of the approved SWP3, then enforcement action as authorized in R.C. 307.79 shall be initiated.
- (4) Subsequent to the issuance of a stop-work order penalties may be imposed consistent with O.R.C. 307.79

# F. Schedule of Fees.

(1) The schedule of fees set forth by the Board of County Commissioners for plan review, Development Area inspection and permit approval as established, and shall be due and payable upon the submission of the SWP3 and completed Butler County Earth Moving permit application to the Department of Development at the time of construction drawing submittal.

<sup>\*</sup>If earth moving begins without Earth Moving Permit and approval of SWPPP/construction drawings the Development Area will not be recorded until fee paid in full, application turned in and SWPPP/construction drawing approval letter/permit issued.

<sup>\*</sup> Make Fee Payable to Butler County, turn into the Department of Development and Planning. The SWPPP/ construction drawings and the Earth Moving permit application can be turned in at the Department of Development and Planning or the Butler County Storm Water District.

# G. Complaints

The Butler County Storm Water District shall investigate any complaint related to Earth Disturbing Activities covered by this resolution in a timely manner. After inspection is completed, if found to be in violation, the Butler County Storm Water District will take necessary action to achieve compliance on the particular Development Area as described in Article VII section 4.05

# H. Appeals Process

Any person denied a permit pursuant to section 3.07 (e) of the Butler County Subdivision regulations has the right to appeal to the **Board of Supervisors of the Butler Soil and Water Conservation District** in writing within 60 days of the grievance.

# I. Effective Date and Validity

This resolution shall become effective within Butler County 30 days after adoption. If any section, subsection, paragraph, clause, phrase, or provision of this resolution is adjudged invalid or held unconstitutional, such a decision shall not affect or void any of the remaining portions.

# SECTION 7.05 LOT POLLUTION PREVENTION CONTROL PLAN, LOT EROSION AND SEDIMENT CONTROL PERMIT (Residential & Commercial Builders)

# A. Lot Erosion and Sediment Control Permit

(1) Upon submittal for a Building Permit from the Butler County Department of Building and Zoning, a Lot ESC plan is required to be submitted if the parcel is greater than one acre or within a platted subdivision. A Butler County Lot Erosion and Sediment Control Permit is also required for each lot within a platted subdivision upon approval of the Lot ESC plan. The Builder/Owner is required to meet all requirements in section 5.02 in order to maintain an approved Lot Erosion and Sediment Control Permit.

# B. Lot Pollution Prevention Control Plan and per lot building performance standards

- (1) In general, the Lot Pollution Prevention Control Plan shall consist of the Development Area erosion & sediment control plan and describe/ show how waste construction material will be disposed of. See Appendix B for an example. A Pollution Prevention Plan is required for all other platted Lots and can be created with the Building and Zoning lot plan. This plan should include the following:
  - a. Provide the Parcel Number, Address, Lot Number, and Subdivision Name with appropriate Section or Block.

- b. Show the existing contours and final proposed spot elevations with directional flow arrows of the Lot. Proposed contours may be required by Butler County Storm Water District as needed. Existing grading may be represented off of the development's grading plan. Show all existing and proposed locations of buildings, roads, parking facilities and utilities.
- Proposed grading of Lot shall not remove or change any existing surface drainage that have been recorded such as Watercourses, Swales, Streams, Flood Routes and or Channels without prior approval.
- d. Water runoff should be diverted away from Steep Slopes and areas with exposed soils.
- e. All concrete trucks should washout at designated areas as defined by the Developer or his Contractor. See Article VII Section 2.16 Control of Construction Development Area Debris and Wastes.
- f. Note and show the location of each proposed soil erosion & sediment control Best Management Practice (BMP) as specified in the ODNR Rainwater and Land Development Manual, including:
  - i. Perimeter sediment & erosion control BMP around the Lot and/or adjacent to surface drainage swale as topography and need determines. Appropriate BMP's may include, but are not limited to, a mulch berm, silt fence, compost logs, temporary sediment traps/basins, temporarily modified detention/retention facilities, check dams, curb and yard inlet protectors, temporary diversions, and proper Stream crossings.
  - ii. A construction entrance is required on all Lots within the subdivision. It is the Builder's responsibility to ensure the construction drive is maintained and properly dressed with stone. See appendix A. Construction vehicle access should be limited to one route, to the greatest extent practical.
  - iii. Mud tracked onto the street or sediment settled around curb inlet protection shall be inspected daily and cleaned as needed to prevent it from accumulating. It shall be removed by shoveling and scraping and shall NOT be washed off paved surfaces or into storm drains.
  - iv. Temporary seeding should be placed on any Lot that is to remain idle for period more than 21 days. Each Lot should be properly seeded and mulched within 7 days of completion of the rough grading. This includes stockpiles excavated from basements. All stockpiles shall be situated away from streets, swales, or other waterways.

- C. Show the boundaries of Wetlands and Stream Channels on the Lot ESC plan. If they are to be modified or removed a permit may be required through the Army Corps of Engineers, Ohio Environmental Protection Agency, or Department of Natural Resources. It is the Builder's responsibility to acquire the appropriate permits.
- D. All ESC's shall be periodically inspected by the Builder/Owner to ensure proper function and to identify failures. If the inspection reveals that a control practice is in need of repair or maintenance, with the exception of a sediment settling pond, it must be repaired or maintained within three (3) days of the initial inspection. Sediment settling ponds must be repaired or maintained within 10 days of the inspection.
- E. The Builder/Owner shall maintain ESC's until Permanent Vegetation is established.

# SECTION 7.06 COMPLIANCE RESPONSIBILITY & FAILURE TO COMPLY

- A. Butler County Board of Commissioners hereby designates Butler County Storm Water District as its duly authorized representative for the purposes of enforcement activity permitted by O.R.C. 307.79
  - Whenever public improvements have not been constructed and/or maintained in accordance with these regulations, the Board of County Commissioners may exercise its rights of foreclosure on the bond to bring the improvements into compliance.
  - 2. Failure to comply with Section V Lot Pollution Prevention Control Plan may result in one or all of the following:
    - a. Loss of Butler County Lot Erosion and Sediment Control Permit
    - b. Stop work order No inspections
    - c. Failure to obtain additional permits/approvals
    - d. Fines or penalties as determined by the Board of Commissioners

# B. Performance Liability and Responsibility

No provision of this resolution shall limit, increase, or otherwise affect the liabilities of the applicant nor impose any liability upon Butler County not otherwise imposed by law.

The applicant is responsible for carrying out all provisions of the approved Storm Water Pollution Prevention Plan and for meeting all the standards and requirements of this regulation.

# C. No Release from Other Requirements

No condition of this permit shall release the applicant from any responsibility or requirements under other federal, state, or local environmental regulations. If requirements vary, the most restrictive requirement shall prevail or where context suggests it, requirements and/or restrictions may be cumulative. Failure to enforce a

requirement is not a waiver of other applicable requirements.

# D. Violations

- 3. Earth moving activities regulated under this regulation shall not begin until the Butler County Earth Moving permit is granted as spelled out in Article VII Section 3.07 and all necessary state and federal permits and appropriate approvals of Storm Water Pollution Prevention Plans have been granted to the Development Area Owner/Applicant.
- 4. No person shall violate or cause or knowingly permit to be violated any of the provisions of this resolution, or fail to comply with any of its provisions or with any lawful requirements of any public authority made pursuant to it, or knowingly use or cause or permit the use of any lands in violation of this resolution or in violation of any approval permit granted under this resolution.

# E. Enforcement & Penalties

- (1) All Development Areas are subject to inspections by the Butler County Storm Water District to ensure compliance with the approved SWP3.
- (2) After each inspection a status report of the ESC findings shall be prepared and distributed by Butler County Storm Water District to the Owner/Operator.
- (3) If it is found that the operations are being conducted in violation of the approved SWP3, then enforcement action as authorized in R.C. 307.79 shall be initiated.
- (4) Subsequent to the issuance of a stop-work order, penalties may be imposed consistent with O.R.C. 307.79

# F. Schedule Of Fees.

The schedule of fees shall set forth by the Board of County Commissioners for plan review, Development Area inspection and permit approval as established, and shall be due and payable upon the submission of the Butler County Lot Erosion and Sediment Control Permit application to the Department of Building and Zoning at the time of lot building construction.

Make Fee Payable to Butler County, turn in fee and application to the Department of Development: Building and Zoning.

# G. Complaints

The Butler County Storm Water District shall investigate any complaint related to lot erosion and sediment control activities covered by this resolution in a timely manner. If investigation finds violations, the Butler County Storm Water District will take

appropriate actions to achieve compliance on the particular Lot.

# H. Appeal Process

Any person denied a permit pursuant to section 5.01 (1) of the Butler County Subdivision regulations has the right to appeal to the **Board of Supervisors of the Butler Soil and Water Conservation District** in writing within 60 days of the grievance.

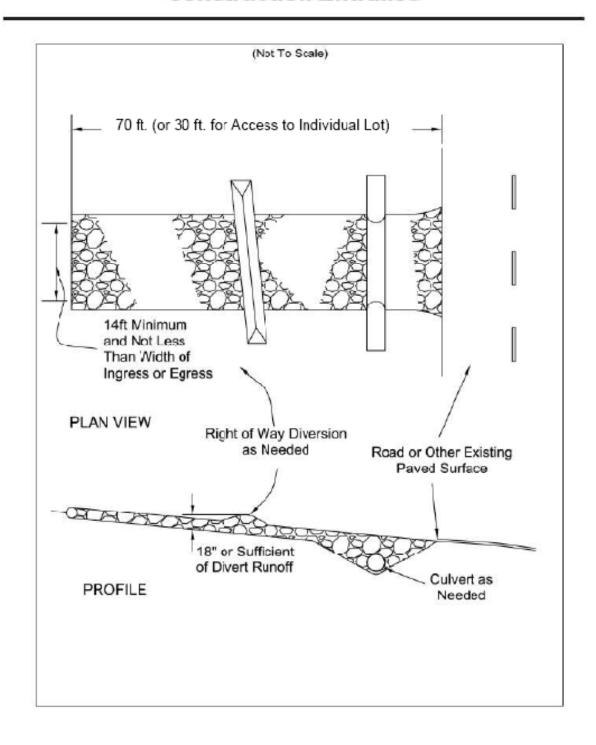
# I. Effective Date And Validity

This resolution shall become effective within Butler County 30 days after adoption. If any section, subsection, paragraph, clause, phrase, or provision of this resolution is adjudged invalid or held unconstitutional, such a decision shall not affect or void any of the remaining portions.

# Appendix A

Specifications for

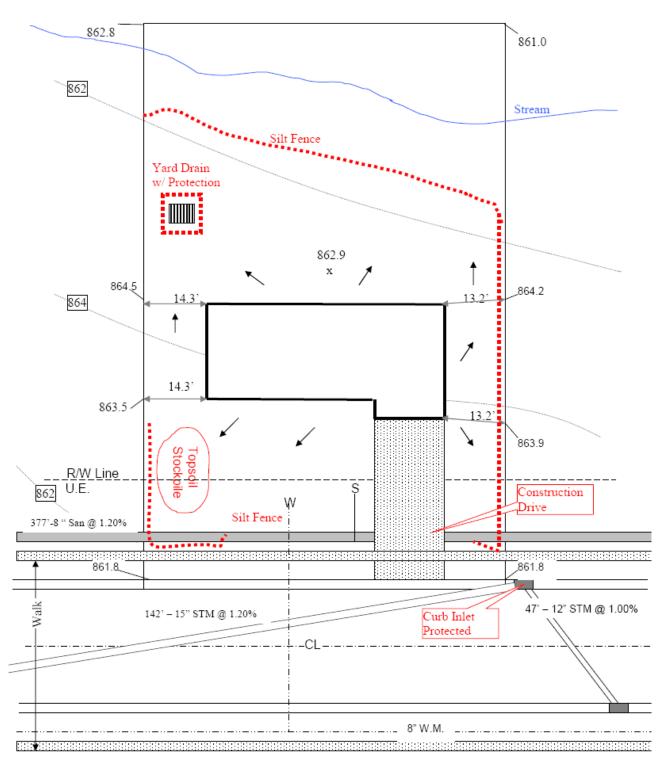
# **Construction Entrance**



# Appendix B

Specifications for

# **Small Construction Site Controls**



# Appendix D Article V of Butler County Subdivision Regulations (Post-Construction Storm Water Management Requirements)



# ARTICLE V

# SITE DRAINAGE AND ROADWAY DESIGN STANDARDS

# SECTION 5.01 GENERAL STATEMENT

It is not the intent of this Article to take away from the designing engineer any responsibility for the technical adequacy of their design or ability to use their engineering judgment and discretion in the practice of their profession. It is recognized that matters of engineering design cannot be set out in writing to cover all situations; however, the design standards as set out herein represent good engineering practice. All variances and the reasons for their use are to be submitted to the Butler County Planning Commission for review.

Subdivision streets are to be designed to discourage thru-traffic movements and encourage operating speeds of approximately twenty-five (25) miles per hour. All street and drainage design shall be done in accordance with the current Ohio Department of Transportation Location and Design Manual and the American Association of State Highway Transportation Officials "Green Book" unless otherwise specified in this document. If a street has been stubbed to the property to be developed, those streets must be continued into the proposed development from that point. The Butler County Planning Commission has the right to accept, deny or require that a road be connected to any existing road if it is in the public interest.

The County Engineer or County Drainage Consultant, at any time during design or construction or even after the recording of the final plat, shall have the authority to modify any engineering or construction detail, whenever required for the protection of the public interest.

All sites greater than one acre must comply with the Ohio Environmental Protection Agency NPDES (National Pollution Discharge Elimination System) Permit for Storm Water Discharges Associated with Construction Activity, and any other requirements of the MS4.

# SECTION 5.02 STREET DESIGN STANDARDS

- A. The street layout of the subdivision shall be in general conformity with a plan for the most advantageous development of adjoining areas and the entire neighborhood.
  - (1) Neighborhood Collectors are to provide connections between a higher road classification in the thoroughfare system, have restricted access near intersections (internal and at both termini), and are used for collection of neighborhood traffic. Where appropriate to design, proposed streets shall be continuous and in alignment with existing, planned or platted streets with which they are to connect.
  - (2) Proposed streets shall be extended to the boundary lines of the tract to be subdivided, unless, in the opinion of Planning Commission, such

extension is not necessary or desirable for the coordination of the layout of the subdivision with the existing layout or the most advantageous future development of adjacent tracts. Cul-de-sac streets shall serve a maximum of twenty-five (25) lots.

- (3) Proposed streets shall intersect one another as nearly at right angles as topography and other factors of good design permit.
- (4) Wherever there exists adjacent to the tract to be subdivided a dedicated or platted and recorded half-width street or alley, the other half width of such street or alley shall be platted.
- (5) Access Management of the major thoroughfares shall be taken into consideration in the design of the subdivision plat. The designer shall use the <u>Butler County Access Management Regulations</u> as guidance when determining access point(s) along all thoroughfares identified in the latest version of the Butler County Thoroughfare Plan.
- (6) Residential developments abutting Major or Minor Arterials or Major Collectors shall be platted in such a manner to cushion the impact of the heavily traveled highway. This may be accomplished in several ways (Please see Appendix A, drawing A-4 for a sample drawing).
  - (a) The most desirable method consists of not fronting the lots on the highway but on a minor street paralleling the highway or on a cul-de-sac extending toward the highway. All lots abutting the highway shall be platted at the setback line with a generous lot depth of fifty (50) feet or whatever the zoning code specifies for that particular zoning district (whichever is greater). Driveway access from the lots will not be permitted onto the main thoroughfare.
  - (b) Fronting lots on Arterials or Collector streets is discouraged and will generally only be approved if there is some special feature of the land to be subdivided which prohibits the method described above from being used. In all cases where there will be lots fronting on the main thoroughfare, the lots shall be platted at a very generous depth (50 feet) and vehicular access to the lots shall be provided by means of service drives or common driveways. Access to the main thoroughfare should be held to a minimum.
- (7) Public improvements will not be approved if located under any private street.
- (8) Sidewalks shall be provided on both sides of all newly dedicated streets. This applies to all residential, commercial and industrial developments. Curb ramps are to be provided at the intersection of all sidewalks and all streets. All

- sidewalks and curb ramps are to be constructed as per the typical construction detail (Please refer to Appendix C, drawing C-2 C-5 for detailed drawings).
- (9) In order to provide better access to schools and business districts, subdivisions that abut existing Arterials shall provide sidewalks along the Arterial for the full distance of the development.
- (10.) Public streets are required to comply with State water quality requirements identified in the latest NPDES Permit for storm water discharges associated with construction activity. Water quality treatment shall comply with the current Ohio Department of Transportation Location and Design Manual. Post-construction BMP's and water quality treatment shall be contained within the limits of the public right-of-way or easement.
  - 1. Dedicate additional right-of-way or easement to encompass the post-construction BMP
  - 2. Provide water quality treatment in a regional post-construction BMP
  - 3. Mitigate the water quality treatment with an off-site BMP, with the approval of OEPA.
- (11.) A reduced street width of 25' B/B may be used if the conditions in <u>Appendix D</u>, table <u>D</u> are met.
- (12.) Plan shall include location, size and type of both streets name regulatory signs. All regulatory signage shall meet the requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD).
- B. The arrangement, character, extent, width, grade, construction and location of all streets shall conform to the standards herein set forth (Please refer to Appendix D, table D-1). All street design shall be done in accordance with the current Ohio Department of Transportation Location and Design Manual and the American Association of State Highway Transportation Officials "Green Book".
  - (1) Temporary dead-end streets shall be permitted where necessitated by the design of the subdivision; provided that temporary turn-around shall be constructed where a sum of 6 lots are fronting (including corner lots) on such temporary dead-end streets (Please see Appendix C, drawing C-21 for temporary turnaround details). Turnarounds must be installed prior to platting of the subdivision.
  - (2) The grades of streets shall not be less than one-half of one (.5) percent and shall not exceed ten (10) percent.
  - (3) All changes in street grades above one (1) per cent shall be connected by vertical curves of a minimum length of fifty (50) feet.

(4) All subdivision streets must be designed for curb and gutter unless the lots contain a minimum of 65,000 square feet and a minimum of 150 feet of public road frontage.

# SECTION 5.03 INTERSECTIONS

- A. At Local Street intersections the right-of-way line shall be rounded by an arc, the minimum radius of which shall be twenty (20) feet.
- B. Local Streets that intersect a higher roadway classification, **the right-of-way line shall be the chord of a rounded arc**, the minimum radius of which shall be thirty (30) feet. (Please refer to Appendix C, drawing C-19 for standard intersection drawings for minimum radius requirements for the different types of roadway).
- C. All intersections of proposed subdivision streets must meet ODOT intersection sight distance requirements. In addition, the existing county or township road must meet ODOT stopping sight distance, and sight triangle requirements. This is particularly important where a proposed street comes out on the top of an existing crest vertical curve.

If unique and unusual circumstances warrant, the developer and their engineer may apply to the Planning Commission for design exceptions.

# SECTION 5.04 IMPROVEMENT PLANS

- A. Standard Drawings: Butler County Standard Drawings (See contents of Appendix C), shall be used to show the details of improvements which are frequently used. ODOT Standard drawings, State Office, Columbus, Ohio, shall be used for all improvements not covered by County Standards. Those Standard Drawings which will be used for the construction, shall be listed on the title page of the Improvement Plan. Special details are to be included in the plans for all structures not covered by standard drawings.
- B. General Notes: General notes shall include any pertinent information that is not covered in the Standard Drawings. A note shall be included as follows: "All work shall be performed in accordance with the Butler County Subdivision Regulations and the authority having responsibility for utilities in the area". (Please see Appendix A, Drawing A-11, for a sample drawing).

# C. Plan Contents:

- (1) A detailed typical cross-section of the proposed street(s) is to be included on the plan. (Please refer to Appendix C, appropriate drawings C-1 thru C-5)
- (2) All proposed lots and streets are to be shown on the plan. All bearings, angles, distances and curve information must also be provided.

- (3) All streets, curbs, sidewalks, water lines, sewer lines, drainage structures and all other improvements must be shown in plan view and in profile with all sizes, elevations, distances and percent grades clearly indicated.
- (4) A grading plan showing existing and proposed contour lines and lot grading arrows shall be provided. Cross-sections may also be required.
- (5) The locations shall be shown on existing utilities, structures, drives, etc. which may be affected by the improvement.
- (6) Where a street ends and may be extended in the future, the profile shall be shown for at least 200 feet beyond the end of the street.
- (7) Street names, lot numbers, lot dimensions and easements shall be shown. Easements shall be provided for all existing or proposed channels. All easements for a water course or ditch shall be wide enough to contain said ditch, including side slopes, plus ample clearance for maintenance operation. All easements shall be shown and labeled on the record plat and on the construction drawings.
- (8) All plans are to be done on a scale of 1'' = 50' or greater.
- (9) A minimum opening and back of curb elevation where pertinent shall be labeled.
- (10) A detailed typical cross-section of proposed hiker/biker trails or pathways are to be included on the plan. (Please refer to Appendix C, appropriate drawings C-30)
- (11) Streets Location of all post-construction BMP's with a standard detail referenced on the title sheet. Water quality and post-construction BMP's shall be in conformance with the current Ohio Department of Transportation Location and Design Manual.

# SECTION 5.05

# FINAL DRAINAGE PLAN

A final drainage plan shall be prepared consistent with ODOT's current <u>Location and Design Manual</u> and/or ODNR's <u>Rainwater and Land Development Manual</u>, and the following criteria unless otherwise approved. If in conflict, the Subdivision Rules and Regulations shall prevail. All developments are to comply with the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES).

# A. Minor System Design:

- (1) <u>General</u> The minor system design shall be based on a post development 10 year storm. This system includes all closed storm sewer, open channels, inlets, manholes and all features designed to collect storm water from streets and lots including the necessary piping for the collection of sump pump drains. The Rational Method (Please see <u>Appendix D</u>, table <u>D-2</u>) will normally be used when calculating peak rate of runoff in determining conduit size and grade.
- (2) <u>Hydrologic Analysis</u> Storm runoff can be calculated using the Rational Method (Please refer to <u>Appendix D, table D-2 thru D-4</u>) or the SCS (Urban Hydrology for Small Watersheds) Technical Release 55 (TR55). In cases of large channels, regression equations may be used. The Rational Method shall not be used for drainage areas of greater than 20 acres, TR55 should be used for drainage areas greater than 20 acres.

# (3) <u>Storm Sewer Design</u>:

- a. General All conduits are to be designed on a 10 year flowing full design using the Manning Formula. (Please refer to <u>Appendix D, Table D-5</u>) The minimum diameter shall be 12 inches.
- b. Material Pipe material for culverts and storm sewers shall comply with current Ohio Department of Transportation (ODOT) specifications. (Please refer to Appendix D, Table <u>D-6</u> and <u>D-7</u> for the applicable ODOT specification numbers).
- c. Roughness Coefficient (n) Manufacturers "n" value plus .004 to account for bends and junction losses is to be used.
- d. Velocity The allowable velocity in the storm sewer shall not be less than 3.5 feet per second or greater than 14 feet per second for corrugated metal pipe and twenty (20) feet per second for concrete and plastic pipe based on a ten (10) year frequency storm.
- f. Cover All pipes shall meet the manufacturer's minimum requirements for depth of cover as to not crush or deform the pipe in any way.
- g. All changes in storm sewer, grade, alignment and the intersection of two or more sewers must take place in a manhole or catch basin.
- h. A drop manhole or catch basin shall be utilized on steep slopes or on hillsides with long runs of storm sewer pipe.
- (4) <u>Storm Sewer Inlets</u> The curb inlet shall be spaced a maximum distance of 300' from another catch basin or high point. Closer spacing may be necessary if the capacity of the inlet is less than the flow tributary to the inlet. Curb inlets shall be placed in such a manner that no storm water shall flow through any intersection.

# (5) Storm Sewer Outlets:

- a. Energy dissipation must be used at the outlet of all storm sewer structures and storm water facilities.
- b. **Rock Channel Protection** should be installed at all storm sewer pipe outlets to swales, ditches, creeks or streams. The rock should be installed at a minimum width of 4' or the width of the headwall, which ever is greater and at a depth of 1.5'. Geotextile fabric or a 6" (#3 or #4) granular bed should be laid under the rock to prevent undermining of the rocks. If fabric is used, overlaps should be at a 12" minimum and should be to ASTM standards (ASTM D-1777 and ASTM D-1682). Rock size shall be determined using ODOT's current Location and Design Manual.
- c. **Level Spreader** should be used to convert concentrated flow into sheet flow. This should only be used when the storm sewer outlets within 200 feet of a floodplain, a wetland area or densely vegetated areas with no defined conveyance. Level spreaders shall not be used where the natural topography will re-concentrate flow below the point of discharge or in areas with highly erosive soils. (Please refer to Appendix C, appropriate drawings C-31)
- d. **Energy Dissipation** headwall shall be installed on all storm sewer pipe outlets unless the outlet is within the storm water detention / retention facility or is a culvert. The use of prefabricated headwalls with energy dissipation blocks is required. Rock channel protection immediately downstream of the device is still required; however the length of protection can be reduced by half. See Appendix C, appropriate drawing C-13. Culverts with erosive velocities may incorporate energy dissipation headwalls in their design
- (6) <u>Sump Pump Lines</u> No sump pump lines may be connected to the sanitary sewer or outlet to the curb. A separate pipe of 4 or 6 inch diameter is to be run behind the back of the curb and tie into the nearest possible catch basin or storm manhole. The size of the sump line is to be determined as per <u>Appendix D</u>, <u>Table D-7</u>.
  - a. Standard "Y"'s or "T"s should be installed 10 feet from the property line on the downhill side of the lot and marked in the field. Cleanouts should be spaced approximately every 400 feet.
  - b. No downspouts may be tied to the sump line. All downspouts must be run separately to catch basins or released on splash blocks.
  - c. All sump pumps must be connected to the sump lines provided at the street or at an adjacent catch basin, storm sewer manhole or acceptable watercourse.

# B. Major System Design:

- (1) <u>General</u> The intent of planning a flood routing system is to ensure that storm water runoff which exceeds the capacity of the storm sewer system shall have a route to follow which will not cause a major loss of property or life. Flood routes are to be directed towards storm water retention / detention facilities or acceptable watercourse.
  - a. Minimum opening elevations are to be set by the engineer on lots adjacent to one-hundred (100) year flood routes and storm water retention / detention facilities. These elevations are to be a minimum of one (1) foot above the one-hundred (100) year water elevation. These elevations are to be clearly labeled on the plan and the record plat. A benchmark location and elevation should be noted on the final record plat.
  - b. Since streets may be used as a routing path, the major system must be taken into account in the initial design of the development. It shall be designed in such a manner as to direct the storm water into the detention or retention area.
  - c. Provide profile of major flood routes from centerline of street to rear of lot.
- (2) <u>Capacity</u> The combination of the major and minor system shall have the capacity to carry runoff from a 100 year frequency storm.
  - a. Where the street is designated as the major drainage way, the depth of flow shall not exceed 8 inches at the face of the curb.
  - b. When the major drainage way is located outside a street right-of-way, easements shall be provided and a grading plan is to be submitted with detailed elevations showing the flood being contained in this area.

# C. Culvert Design:

(1) <u>Methodology</u> - Technical Release 55 and the Hydraulic Circular No. 5, which can be obtained from the Superintendent of Documents, U.S. Government Printing Office, are the required procedures for design.

# (2) Design:

- a. A single span culvert should always be used.
- b. All culverts shall be designed for the fifty (50) year storm with head water and a flood route provided to accept a one hundred (100) year storm.
- c. Maximum allowable fifty (50 year) head water elevation:
  - \* 18" below top of the curb
  - \* 12" below the edge of the pavement (non curb & gutter section)

- d. The design of the drainage system should not cause backwater onto any adjacent property or affect lowest openings on adjacent structures. If additional backwater is caused, an easement from the affected property owner must be obtained or redesigned for a lesser backwater condition. The backwater condition should be checked on the fifty (50) and one-hundred (100) year frequency storms. All easements shall be obtained for the one-hundred (100) year condition.
- e. A structure having a clear opening of 10 feet or more shall be classified as a bridge. See the Bridge Design section within this document.
- f. Entrance Loss Coefficient see <u>Appendix D, Table D-8</u> represents standard entrance coefficients to be used in culvert design.

# (4) <u>Design Considerations:</u>

- a. Adjust the locations of inlets and outlets of a culvert as it relates to sidewalks, bicycle facilities, pathways or trails, houses and open space areas utilized as common playgrounds or areas, meeting places, walking paths or trails such that it does not interfere or cause potential erosion.
- b. Structures crossing a public road not conveying storm water runoff or having a purpose other than storm water conveyance must submit Tunnel Maintenance Agreement.

# D. Open Channel Design

(1) <u>General</u> - Any newly designed open channel shall only accommodate a small drainage area (i.e. lot swale). All other design drainage features shall be enclosed with storm sewer, with the exception of large, major channels. Relocated channels should have similar sinuosity, meander, and frequency. Large, major channels may fall within the requirements of the <u>Butler County Flood Damage and Prevention Regulations</u>, OEPA and or Army Corps of Engineers.

# (2) Design:

- a. Open channels are to be designed using a full flow 10 year frequency storm unless the channel is part of the major storm system then it must be designed using a 100 year storm frequency. Please refer to Appendix D, Table D-9 for a list of acceptable manning coefficients for use in the manning equation for open channel design.
- b. Special provisions such as a check or drop structure will be addressed on an individual basis.
- c. The longitudinal slope of a channel should be 1% or greater. Any channel with a slope below 1% or with a small continuous flow must have a paved bottom, or underdrained with a low flow pipe. All side slopes shall be 4:1 or flatter in residential areas and 3:1 or flatter in commercial and industrial areas unless

otherwise approved by the County Engineer's Office.

(3) <u>Permissible Velocities</u> - In designing an open channel, the low flow and grade shall be addressed as to prevent stagnation. The velocity is to be calculated using a bank full condition or a minimum 10-year frequency storm, whichever is greater. Channel linings or protection shall conform to <u>Ohio Department of Transportation Location and Design Manual (Ditch Design Criteria 1102.3)</u>. Permanent protection shall conform to ODOT Specifications 659, 660, 670, or Supplemental Specification 836)

# E. Storm Water Facilities - Detention / Retention

- (1) <u>General</u> The objective of a detention/retention facility is to regulate the rate of runoff, control the peak discharges, and improve water quality by reducing the impact on the downstream drainage system. Design of the facility must account for vehicular access to and around the storm water facility for the purpose of maintenance, repair, and or replacement. In areas with geologic and hydrologic conditions that promote rapid infiltration of recharge waters to an aquifer; see **Section 5.06 Ground Water Pollution Potential.**
- (2) <u>Design Criteria</u> Storm water management facilities are to be designed with flow rates meeting the Butler County Modified Critical Storm Method in <u>Appendix D</u>, <u>Table D-11</u>. For all storm events greater than the Critical Storm, reduce the flow rate by one storm event (i.e. Post-100 to Pre-50, Post-50 to Pre-25 etc). Facilities may incorporate the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES), provided the design meets the criteria specified in this document.

<u>Traditional</u> – Utilization of this facility occurs near a creek, stream or other receiving conveyance. This facility should be design with a staged discharge that meets the above design criteria.

- a. In detention facilities, a post-construction sediment trap shall be constructed immediately upstream of the facilities outlet structure. Sediment trap design shall comply with ODNR's Rainwater and Land Development Manual.
- b. Facility may be utilized as the site's temporary sedimentation and erosion control basin.

<u>Side Saddle</u> – The facility is to be utilized immediately adjacent to creeks and streams or when floodplain volume compensation is required. This facility should be design with a staged discharge.

a. Maximum water surface elevation for storm water detention/retention shall be at or below the main channels 10 (ten) year storm elevation. Compensated floodplain volume may not be accounted for as required storm water storage however; it can be added to the storm water storage volume.

- b. A spillway is required at both the upstream and downstream end of the storm water facility. Spillways are to have protection from toe of channel to the toe of detention/retention.
- c. Upstream and downstream spillway is to be set at the channels 10 (ten) year flow elevation and designed for the channels 100 (one-hundred) year flowrate.
- d. May be utilized as the site's temporary sedimentation and erosion control basin.
- e. In detention facilities, a post-construction sediment trap shall be constructed immediately upstream of the facilities outlet structure. Sediment trap design shall comply with ODNR's <u>Rainwater and Land Development Manual</u>.

<u>In-Line</u> – A facility that is constructed in and across the existing creek or stream. This facility should be design with a staged discharge. Due to the nature of this facility, the design should be evaluated on a watershed scale. Assume the off-site watershed as fully developed without upstream storm water detention/retention facilities. These facilities may require Federal, State and or Local permits and approvals. Proof that these agencies have either approved or denied a request to install an in-line storm water facility must be provided to the Planning Commission prior to construction drawing approval. These facilities are not eligible under the Ditch Maintenance Program.

- a. Prior to design of such facility, the developer/engineer shall scope the design parameters with the County Engineer's Office. In general, these facilities should evaluate watershed based water quality and quantity.
- b. Facilities may be subject to Army Corps of Engineer's and/or Ohio Environmental Protection Agency reviews and permits.
- (3) <u>Design Requirements for all Storm Water Facilities</u>— When designing a storm water facility, the following criteria must be followed as to provide for proper appearance, and maintenance.
  - a. The bottom of the detention area should be constructed with sufficient slopes to drain properly (.5% min).
  - b. All storm sewer pipe outlets are to be set above or at the normal water surface elevation of any pond; submerged or partially submerged pipes are not permitted. A submerged pipe at the outlet control structure to accomplish water quality volume is acceptable. Culverts connecting two or more ponds may be submerged upon the approval of the County Engineer.
  - c. Paved gutter or a low flow underdrain shall be constructed from all inlet pipes, and or swales, to the outlet structure. Concrete cut off walls shall be constructed at the beginning and end of the gutter except where the gutter intersects with a catch

- basin or headwall. Where two gutters intersect, large radii shall be used so that the change in direction of flow is gradual.
- d. Side slopes for detention facilities shall be no steeper than 4:1 unless existing natural conditions do not make this possible and are not being disturbed as shown on the grading plan.
- e. Anti-seep collars shall be used on all pipe outlets of retention basins, ponds, and or storm water facilities that have incorporated water quality volume. For specifics on Anti-seep collars, see Appendix D, Table D-10.
- f. There shall be a minimum of twelve (12) inches of freeboard between the top of the dike and the post-developed 100 (one-hundred) year water surface in the facility, with the emergency spillway flowing at the pre-developed 100 (one-hundred) year design flow.
- g. The emergency spillway shall safely pass the peak flow for a pre-developed 100 (one-hundred) year frequency storm with a safe velocity (8.0 fps max). The spillway is to be cut on existing ground or other protection on the fill slope be provided. Spillways constructed on fill dirt shall be constructed of concrete with a minimum thickness of six (6) inches. Rock channel protection or concrete matting shall be installed from the spillway down to the toe of the downstream slope of the facility or to the top of bank.
- h. The drainage easement for this facility shall encompass the Post-100 (one-hundred) year water surface elevation plus a horizontal offset of ten feet (10') for maintenance and access.
- i. A twenty (20) foot access easement shall be provided for easy ingress and egress to and from the basin. Location of the access is preferred to be from an existing County or Township Thoroughfare directly to the storm water facility. This access shall have a maximum slope of 12%.
- j. Trash guards should be installed when clogging of the outlet structure is probable.
- k. Temporary riser pipes should be installed at all outlet pipes to the detention basins.
- 1. Construct a sediment forebay at inlets to the storm water facility. Bottom of forebay is to be concrete hard surfaced.

# F. Bridge Design/Construction

(1) <u>Methodology</u> – Use Technical Release 55 (TR-55) to estimate peak runoff flow rates in conjunction with a HEC-RAS model in determining the limits of the existing and proposed one-hundred (100) year water surface elevation, and floodplain.

- (2) <u>General</u> A certified ODOT contractor is required for the installation of cast-in-place or pour-in-place structures. All designs shall conform to the latest edition of the <u>Ohio Department of Transportation Bridge Design Manual</u> unless specified in this document. To minimize bank erosion and failure, structures are to align with the existing channel. Design shall also comply with the Butler County <u>Flood Damage Prevention Regulations</u>
- (3) <u>Design</u> The following items must be addressed and included with the subdivision plan submittal:
  - a. Hydraulic and hydrologic analysis using TR-55 and HEC-RAS. Structure hydraulic evaluation shall be determined using the HEC-RAS program in lieu of manufacturer's design software. All designs shall pass the 100 (one-hundred) year event.
  - b. Scour protection based upon an analysis, shown and noted on the plan.
  - c. Shop drawings and design detailed drawings (of both sub-structure and super-structure) stamped by a registered engineer
  - d. Structures shall be designed using HS-25 loading
  - e. Soil borings will be required for all structures. Borings are to be at the location of the proposed bridge substructure. Submit a soils report with the plan submittal, and include recommendation for the substructure and soil bearing capacity by a geotechnical engineer.
- (4) <u>Design Requirements</u> Preferred designs for larger spans are concrete pre-cast single span units or concrete box beam. A single span opening is required for all structures having a clear span of 100 (one-hundred) feet or less. A multi-span structure is permissible for spans greater than 100 (one-hundred) feet. Pre-cast concrete box units are permissible for structures having a clear span less than 16 (six-teen) feet. The engineer shall also consider maintenance of the structure when determining the structures height. At a minimum, the height of the structure shall be 8 (eight) feet.
- (5) <u>Right-of-way Requirements</u> In all cases, the engineer shall consider how to access the structure for maintenance. A right-of-way shall be provided around the entire structure at a minimum distance of 30 (thirty) feet. Additional right-of-way or access easement maybe required due to site conditions. Show right-of-way as proposed dedication on the record plat, not by easement.
- (6) Structures crossing a public road not conveying storm water runoff or have a purpose other than storm water conveyance must enter into a Tunnel Maintenance Agreement.

- G. Water Quality Policies (Per Ohio EPA Permit for Storm Water Discharges Associated with Construction Activity); *Non-point Source Pollution*
- (1) Refer to Ohio EPA Post-Construction Q&A Document for guidance. References made to MS4 or Engineer of local jurisdiction must be discussed and approved by the County Engineer, and or Planning Commission.
- (2) When designing storm water facilities for both water quality volume and flood/peak discharge control, the flood/peak control volume shall be stacked on top of the required water quality volume (in other words, use the top of the water quality volume as the base elevation for the flood control volume).
- (3) Water quality openings smaller than four (4) inches, or having an equivalent area, are not permitted in dry (detention) facilities. In designed retention ponds, the water quality opening shall be submerged or protected to prevent clogging.
- (4) In the case where the water quality volume outlet is smaller than four (4) inches for a dry facility, an alternate BMP is required.
- (5) The use of alternative BMP not listed in Ohio EPA Permit for Storm Water Discharges Associated with Construction Activity must have written approval from Ohio EPA prior to plan approval by the MS4 or County Engineer.
- When an existing storm water facility, utilized for new development has not incorporated OEPA's water quality volume, the facility shall be retrofitted and brought into conformance with the current Ohio Environmental Protection Agency Permit for Storm Water Discharges Associated with Construction Activity under the National Pollutant Discharge Elimination System (NPDES).
- (7) Water Quality BMP's for public roadways, and or streets, must be within the public right-of-way. The design of BMP's within the public right-of-way must comply with the current ODOT Location and Design Manual Volume Two, Drainage Design
  - a. Exception: Water Quality BMP's are not required to be constructed within the public right-of-way if a regional water quality BMP is to be constructed, and owned and operated by the MS4. This requires the developer to meet the requirements of acceptance of the BMP by the MS4. IE Ditch Petition or Storm Water Maintenance Agreement, see Section 5.07 POST-CONSTRUCTION STORM WATER OPERATION & MAINTENANCE PLAN
- (8) All developments are required to regulate the contribution of pollutants to the Municipal Separate Storm Sewer System (MS4) owned or operated by Butler County. Allowable storm water discharges are defined in the Illicit Discharge Detection and Elimination Regulations, as adopted by the County Commissioners in resolution No. 09-11-1954.

# SECTION 5.06 Ground Water Pollution Potential; Non-point Source Pollution

- (1) <u>General</u> The intent of this section is to determine how vulnerable ground water is to contamination. Designers shall refer to the latest edition of the <u>Ground Water Pollution Potential of Butler County, Ohio</u> prepared by the Ohio Department of Natural Resources, Division of Water Ground Water Resources Section and Groundwater Research Center, University of Cincinnati or approved DRASTIC Map.
- (2) Purpose To assist developers, engineers, planners, local officials and general public in evaluating the potential for contamination from sources of pollution. Pollution potential maps may also be applied successfully where non-point source pollution is a concern. Non-point source pollution can occur when land use activities are changed or by the addition of impervious area. Reference ODNR Fact Sheet 97-43 & 44. Also reference the Trenton Area Storm Water Management Project, prepared by FMSM 2007 for the Butler County Storm Water District. Susceptible aquifer recharge areas are those with geologic and hydrologic conditions that promote rapid infiltration of recharge waters to groundwater aquifers. This includes any portion of Butler County with a DRASTIC index of greater than or equal to 180 points as determined using the U.S. Environmental Protection Agency DRASTIC methodology: Drastic: A Standardized System for Evaluating Ground Water Pollution Using Hydrogeologic Settings (EPA 600287035).
- (3) <u>Design</u> Maps providing information on relative vulnerability (DRASTIC) can be used to guide the selection and implementation of appropriate best management practices in different areas. Best Management Practices should be chosen based upon consideration of chemical and physical processes that occur from the site, and the effect these processes may have in areas susceptible or highly susceptible to contamination. In these areas, infiltration of the water quality volume is required. A Site Sensitivity Analysis should be performed that evaluates the effectiveness of infiltration. The analysis may eliminate an infiltration practice or determine an appropriate way to avoid groundwater pollution.
  - a. Components of a Site Sensitivity Analysis:
    - Runoff water quality. If runoff water will contain any significant concentration of soluble pollutants that could degrade ground water quality, such as runoff from industrial sites or even from heavily salted parking lots and roadways, a careful review of the pretreatment systems is necessary to assure that the pollutants of concern do not simply pass through.
    - Uses of the ground water -- Is the ground water a sole-source aquifer, in a wellhead-protection area or a significant natural resource? If not, are there current or likely future drinking water supply wells tapping the receiving aquifer in the vicinity?
    - Geologic (ground water) sensitivity. A site with a highly sensitive geology, such as those with carbonate or karst features, may eliminate these areas from consideration.
    - **Depth to water table.** The water table must be far enough below the bottom of the structure to allow the structure to function hydraulically.

- **Soil permeability.** Soil permeability must be great enough to drain the system in a reasonable amount to time, generally 72 hours or less.
- **Soil characteristics.** Evaluate the soil's ability to trap or treat pollutants expected at the given site and provide the required infiltration rate.

Pollution Potential Index Range			
Susceptible	180-199	Pretreatment BMP required prior to storm water facility	
Highly Susceptible	200+	Pretreatment train (or series) of BMP's prior to storm water facility	

(4) Pretreatment BMP's – Used to remove dissolved materials, silt, solids, floating materials, grease and oils from runoff to the maximum extent feasible before runoff enters an infiltration device. These devices can be ponds with skimmers, vegetative filters, sand filters, grassed swales, biofilters, bioretention, filter strips or oil/grit separators prior to infiltrating storm water.

# SECTION 5.07 POST-CONSTRUCTION OPERATION & MAINTENANCE PLAN

The developer of any subdivision with a storm water system must provide the Planning Department with written evidence of a perpetual post-construction storm water operation & maintenance plan and the manner in which it is to be funded. The plan shall be structured so that all property owners within the subdivision shall participate in the maintenance funding of the storm water facilities. The Ohio Revised Code (Chapter 6131, Ditch Petition) outlines one acceptable method by which a perpetual maintenance agreement is established with the county and funded through tax assessments on the subdivided property. [No retention ponds or in-line facilities will be accepted under this method]. Another acceptable method of maintenance is through an incorporated Home Owners Association with the abilities to maintain all storm sewer facilities outside the right-of-way. A copy of the Association documents is to be submitted to the Butler County Engineer's Office for review. At a minimum the following is required in the post-construction storm water operation & maintenance plan;

- (1) Identify the responsible party or person for the operation and maintenance of the storm water facilities
- (2) Provide contact information for the responsibly party/person. Include name, address, telephone number and email address if available
- (3) A full set of approved construction drawings showing the location and type of storm water facilities
- (4) Standard inspection and maintenance schedule for the storm water facilities
- (5) Routine and non-routine maintenance tasks for storm water facilities
- (6) A copy of the subdivision record plat showing all easements for storm water facilities
- (7) Identification and implementation of a funding mechanism for operation and maintenance of the storm water facilities

Once the plan has been approved by the County Engineer, the owner/developer shall record the document at the County Recorders Office. Proof of recording will be required prior to final plat approval.

# SECTION 5.08 CONSTRUCTION REQUIREMENTS

A. Street name signs of a type meeting the standard specification of the County Engineer shall be erected at each highway, road or street intersection. (Please refer to Appendix C, drawing C-23).

### B. Permanent Monumentation:

- (1) All permanent corners of the subdivision (any point of change in bearing) shall be either six inch diameter concrete monuments, thirty-six inches in length, with a suitable centerpoint (one-half inch iron pin, cross notch, or brass plate) or one inch diameter solid iron pins with minimum thirty inch length.
- (2) All street centerlines at intersections, center and offsets of cul-de-sacs, points of tangency and points of curvatures shall be marked with three quarter inch iron pins, minimum thirty inches in length and one quarter inch counter sunk or six inch railroad spikes one quarter inch counter sunk.
- (3) All monumentation must be in place prior to the release of the performance bond.
- (4) All subdivision monumentation shall be tied to state plane coordinates if a state plane coordinate reference monument exists within one half mile of the subdivision. It is important that coordinate pairs for the subdivision be referenced to a monument for the section within which your subdivision lies.
- C. The subdivider shall be responsible for the movement of traffic over the work in accordance with the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) until the street is accepted in accordance with Chapter 711 of the Ohio Revised Code. This includes installation of stop signs in accordance with the guidance with the OMUTCD. The subdivider shall also provide ingress and egress for residents and the general public.
- D. Top course of pavement is not to be placed for a minimum of twelve (12) months after the leveling course and fifty (50) percent of the homes are completed. If after two (2) years, fifty (50) percent of the homes have not been completed, then the top course may be applied. As built drawings must be submitted prior to the placement of the top course of pavement (See Section 3.25 for details).
- E. All fills are to be constructed per ODOT Standards, per Section 203 ODOT Construction and Material Specs unless otherwise specified by the appropriate approving authority.
- F. All construction is to be done in accordance with the latest edition of the Ohio Department of Transportation Construction and Material Specifications Book.
- G. It shall be the responsibility of the developer of the subdivision to maintain a clean street surface during all phases of construction. All future plat approvals concerning the subdivision will be

suspended unless the streets are clean. In cases where streets are not kept clean after the plat has been recorded then work will be suspended on building under construction and no new permits will be issued in that subdivision until the streets are cleaned. It will be the responsibility of the developer to establish a method to achieve this and if necessary require it of the builders.

- H. All ponds remaining as a part of the proposed subdivision development shall be in an acceptable condition based on standards outlined by the NRCS Engineering Standards for ponds prior to recording of the final plat.
- I. Developer and Contractor are responsible to identify an area or areas where concrete trucks, during the construction of the roadway and homes, may washout and clean their vehicles. Purpose of the washout area(s) is to reduce the potential for and illicit discharge into a stream, creek, drainage swale or channel, river, and storm sewer catch basin or storm water detention/retention facility. The washout area(s) are to be shown on the construction drawings.

# SECTION 5.09 FAILURE TO COMPLY

- A. Whenever public improvements have not been constructed and/or maintained in accordance with these regulations, the Board of County Commissioners may exercise its rights of;
  - 1. Foreclosure of the bonds
  - 2. Non-acceptance of future record plats
  - 3. Suspension of Earth Moving, Driveway, Building, and/or Lot Erosion Sediment Control permits
- B. Whenever public improvements have not been constructed and/or maintained in accordance with these regulations, the Butler County Planning Commission may exercise its rights to;
  - 1. Deny future Preliminary Plat approval in developer associated subdivisions
  - 2. Deny future Final Plat approval in developer associated subdivisions
  - 3. Suspend Preliminary Plat approval in all developer associated subdivisions