CITY OF WYOMING
STORMWATER MANAGEMENT PROGRAM

Permit Period 2021-2026
Ohio Environmental Protection Agency Issued Permit No.: 1GQ10070*CG

March 25, 2022

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CITY OF WYOMING

Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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Mike Lippert
Asst. Public Works Director/Water Works Director
City of Wyoming, Ohio

Executive Summary

The City of Wyoming ('City") is required to prepare a stormwater management program (SWMP) in accordance with 40 CFR 123.25 and Ohio law (OAC 3745-39). This document outlines the City's program to develop, implement and enforce a stormwater management program designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act (CWA) in accordance with the Ohio Environmental Protection Agency (OEPA) National Pollutant Discharge Elimination System (NPDES) Phase II program.

The overall goal of the program is to protect water quality by reducing or preventing pollutants from mixing with stormwater runoff, to the maximum extent practicable, that flow into the City's owned and operated small municipal storm sewer system (MS4) and into waterways. A MS4 system is a conveyance or system of conveyances that are owned and operated by the City that are designed or used for the collecting and conveying solely stormwater into surface waters of the state.

Components of the overall MS4 system consist of the following:

- Storm sewer pipe and catch basins
- Stormwater outfalls
- Roadway curbs and gutters
- Ditches and constructed channels
- Post-construction water quality Best Management Practices

A copy of the MS4 Map is provided within Appendix C.

The SWMP addresses the Six Minimum Control Measures as required by state regulations. The program also identifies the City's legal authority to implement the requirements of the OEPA's general permit, OHQ000004, in effect from April 1, 2021- March 31, 2026.

Legal Authority

Resolution No. 25-2009 and Ordinance No. 24-2009 provides the City of Wyoming the authority to control the quality of separate storm water discharge to its MS4. A copy of the Resolution and Ordinance is provided within Appendix A. The City has both the fiscal resources and legal authority to fully implement its Storm Water Management Program. The City has adopted this Storm Water Management Program for the permitting period, 2022-2026. A copy of the OEPA approval letter is provided within Appendix B.

Permit Coverage Area

The SWMP traverses all areas within the incorporated City limits. The City of Wyoming has an estimated population of 8,548 (US Census Bureau-Population Estimates, 2019) and encompasses approximately 2.9 square miles. The City is largely residential, with concentrations of commercial areas along the main thoroughfare, Springfield Pike.

A portion of the City's drainage network discharges to combined storm/sanitary sewers. Storm water management regulations required through the states NPDES permitting authority do not apply to areas served by combined sewers. Areas serviced by combined sewers within the City are identified on the MS4 map provided within Appendix C.

Stormwater Management Program (SWMP)

The SWMP outlines the Six Minimum Control Measures that are expected to result in reductions in the adverse effects of storm water discharged by the City of Wyoming. The City is located in the Mill Creek Watershed (Hydrologic Unit Code (HUC) 05090203 010). This assessment unit is very large, and does not reflect individual tributaries serving Wyoming. The Wyoming-specific major waterway is West Fork Mill Creek as identified on the MS4 map provided within Appendix C. Because the City is largely built-out, the City's Storm Water Management Plan addresses the means and methods for lessening the effects of urban runoff.

The Six Minimum Control Measures (MCMs) are:

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

Each measure is addressed separately within the program. Generally, the program identifies the strategies, existing programs and proposed programs for each minimum control measure. A table of organization outlines who will be responsible for completing each Minimum Control Measure under this permit (Figure 1).

Where applicable, BMPs shall be selected to address U.S. EPA approved Total Maximum Daily Load (TMDL) recommendations for identified water quality problems associated with MS4 discharges within the City's MS4 watershed(s). TMDLs identify and evaluate water quality problems in impaired water bodies and propose solutions to bring those waters into attainment.

The Mill Creek Watershed Total Maximum Daily Load report (TMDL) was approved by U.S. EPA on April 26, 2005. Per the OEPA Small MS4 NPDES General Permit, BMPs are to be selected to address the pollutants identified below.

Pollutants	Urbanized Area Common Sources	Potential Impacts
Nutrients: • Dissolved Nitrogen • Total Phosphorus (TP)	Sources in stormwater runoff: • Lawn fertilizers • Pet waste • Combined sewer overflows • Failing home sewage treatment systems • Construction activities Wastewater: • Sanitary sewer overflows	• Harmful algal blooms • Nuisance growths of aquatic vegetation • Increase water treatment costs • Declining fisheries

The City has incorporated various goals and proposed Best Management Practices within the SWMP to assist with addressing the stream impairments as identified within the TMDL report.

The City shall review and evaluate the overall SWMP on an annual basis to determine if modifications are necessary in meeting the goals for each MCM. Program modifications shall be identified within the modification log located within Appendix N and summarized within the annual reports submitted to the OEPA.

Reporting Requirements

The City will submit its required update annually to the OEPA during the permit cycle. The report will include the status of compliance with the permit conditions, an assessment of the appropriateness of the best management practices (BMPs) and progress towards achieving measurable goals for each of the Six Minimum Control Measures.

A summary of the activities the City will undertake during the subsequent annual reporting cycle and any changes to the BMPs or measurable goals will be included in the annual report.

MCM 1: Public Education/Outreach

Per the OEPA NPDES permit requirements, the City is required to develop and Implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

OEPA Performance Standards:

- Educational materials shall be developed and distributed in addressing a minimum of five stormwater themes or messages shall over the permit term.
- The City shall incorporate more than one outreach mechanism.
- The public education and outreach program shall reach at least 50 percent of the City's population over the permit term.
- TMDL Performance Standard: The storm water public education and outreach program shall, at a minimum, include two storm water themes or messages targeting each TMDL pollutant identified for your small MS4.

The City of Wyoming has chosen a mix of BMPs for public education and outreach. This control measure will target homeowners, commercial property owners, and the general public (those visiting Wyoming and non-homeowners).

Education Materials and Strategies

The City has a number of programs specifically for the dissemination of information to its citizens. These programs include:

1. Educational information posted on the City's maintained website;
2. Educational storm water articles/brochure for publication and distribution;
3. Educational materials to be maintained at City Hall;
4. Water treatment plant tours.

Reaching Diverse Audiences

The planned public education program will use a variety of strategies in which to reach a diverse audience. The City's local strategies include reaching commercial areas through brochures and publications, reaching school age children through the Wyoming City School District, reaching homeowners through City publications and website, and reaching the development community through the placement of codified ordinances on the City's website, as well as publication of educational materials regarding storm water related issues within the City. As a result of this outreach program, diverse audiences will be informed of the importance of reducing storm water pollution, ways they can incorporate pollution reduction in their daily lives, and opportunities for individual or group involvement.

Education Themes and Target Pollutant Sources

The education materials and strategies that the City will implement over the permit period will cover a variety of themes or messages, including but not limited to the following:

1. Nutrient management;
2. Home sewage treatment system (HSTS) management;
3. Commercial/restaurant industry stormwater pollution prevention;
4. Water quality improvement associated with household/residential activities;
5. Construction site runoff management; and
6. Illicit discharge detection and elimination.

Each theme addresses the TMDL pollutants identified by the OEPA.

The distribution of educational material addressing the abovementioned themes will assist with stormwater pollution prevention and improving water quality by targeting the following pollutant sources:

1. Fertilizers (TMDL Pollutant: Dissolved Nitrogen and Total Phosphorus);
2. HSTS discharges (TMDL Pollutant: Dissolved Nitrogen and Total Phosphorus);
3. Illicit discharges (TMDL Pollutant: Dissolved Nitrogen and Total Phosphorus);
4. Construction site stormwater runoff; and
5. Litter and other debris common within urban areas.

Staff from the City's Public Works Department and City Administration involved with the implementation of the SWMP meet on an annual basis. The purpose of the meeting is to review the minimum control measures (MCMs) outlined within the SWMP and discuss the annual educational theme. Educational materials and means of dissemination are determined along with planning public involvement events.

Minimum Control Measure Evaluation

To evaluate the success of this portion of the overall program, the City will annually review the number of people reached by the outreach efforts and review the tracking of water quality related concerns and complaints received by the City from the public. The program can be modified based upon the results of the annual review and determine if additional means of outreach are needed to target specific audiences or pollutants resulting from the concerns and complaints received.

MCM 1: Public Education/Outreach Measurable Goals

- Continue to use existing and develop new outreach mechanisms that provide stormwater pollution prevention education to the target audiences in addressing the chosen themes.
- Distribute education material to at least 50% of City's population over the permit term.
- Annually, determine the effectiveness of the stormwater education program and modify as necessary to ensure that the target audiences are being appropriately reached.

Minimum Control Measure 1: Public Education/Outreach

BMP	Description	Responsible Party	Theme/Message	Target Audience	Target Pollutant	Implementation Year
SWMP Updates – Public Involvement	Present updates at public meeting • The City will review the SWMP that was prepared under the previous OEPA permit coverage term and update the plan to meet the current OEPA permit requirements and incorporate feedback received from the public.	City of Wyoming Public Works Department	Nutrient management; Home sewage treatment system (HSTS) management; Commercial/restaurant industry stormwater pollution prevention; Backyard conservation; Construction site runoff management; and Illicit discharge detection and elimination.	Residents and Commercial Property Owners	• Fertilizers • HSTS discharges • Illicit discharges • Construction site stormwater runoff • Litter and other debris common within urban areas.	2022
Site Improvement Preconstruction Meetings	Per the City's Earthwork Regulations, the City will meet with developers and contractors at site improvement preconstruction meetings and review Ohio EPA and City requirements associated with properly managing the stormwater runoff from the site during and post-construction to assist with illicit discharges into the City's MS4 and streams. • NPDES permit coverage • Stormwater Pollution Prevention Plan (SWP3) • Inspection requirements • SWP3 modifications • Post-construction Operation and Maintenance (O&M) plans, agreements, inspections, and reporting	City of Wyoming Community Development Department	Construction site stormwater runoff management	Development Community	• Total Suspended Solids (Construction Site Runoff) • Nutrients • Non-sediment pollutants commonly located at construction sites	2022-2026
City Website	Information is posted on the City's maintained website to provide stormwater management and stormwater pollution prevention education to developers and the general public. • Storm Water Management • SWMP • Stormwater Pollution Prevention • Stormwater Management Regulations The website additionally provides means for the public to report a stormwater problem/concern. https://wyomingohio.gov/departments/public-works-department/storm-water-management/	City of Wyoming Public Works Department	Nutrient management; Home sewage treatment system (HSTS) management; Commercial/restaurant industry stormwater pollution prevention; Backyard conservation; Construction site runoff management; and Illicit discharge detection and elimination.	Residents	• Fertilizers • HSTS discharges • Illicit discharges • Construction site stormwater runoff • Litter and other debris common within urban areas.	2022-2026

BMP	Description	Responsible Party	Theme/Message	Target Audience	Target Pollutant	Implementation Year
Workshops	Provide educational workshops to the general public in addressing the themes and messages as identified within the SWMP. The City will explore coordinating and/or teaming up within other organizations and groups, including the City's in-house Environmental Stewardship Committee and the Hamilton County Soil and Water Conservation District, to provide additional means of distributing education throughout the community.	City of Wyoming Public Works and City Administration	Water quality improvement associated with household/residential activities.	Residents	• Fertilizers (TP) • Litter, and other debris common within urban areas	2022-2026
Brochures/Flyers	Develop educational information based upon the chosen themes and distribute to the public. • Include brochures/flyers within utility bill mailings • Distribute information and public events • Post brochures/flyers and City Hall	City of Wyoming Public Works and City Administration	Nutrient management; Home sewage treatment system (HSTS) management; Commercial/restaurant industry stormwater pollution prevention; Backyard conservation; and Illicit discharge detection and elimination.	Residents and Commercial Property Owners	• Fertilizers • HSTS discharges • Illicit discharges • Litter and other debris common within urban areas.	2022-2026
Educational Articles	Develop at least one article associated with stormwater pollution prevention and water quality each permit year and distribute by means of the City's news email blast.	City of Wyoming Public Works and City Administration	Nutrient management; Home sewage treatment system (HSTS) management; Commercial/restaurant industry stormwater pollution prevention; Backyard conservation; and Illicit discharge detection and elimination	Residents and Commercial Property Owners	• Fertilizers • HSTS discharges • Illicit discharges • Litter and other debris common within urban areas.	2022-2026
Wyoming Water Works Safe Drinking Water Report	Distribute the annual Safe Drinking Water Report providing information regarding the City's water quality.	City of Wyoming Public Works	Nutrient management; Commercial/restaurant industry stormwater pollution prevention; and Illicit discharge detection and elimination	Residents and Commercial Property Owners	• Fertilizers • HSTS discharges • Illicit discharges • Litter and other debris common within urban areas.	2022-2026

MCM 2: Public Participation/Involvement

Per the OEPA NPDES permit requirements, the City is required to develop and implement a program associated with creating opportunities for public participation. The City is to identify the target audiences and target pollutants to be addressed with the program implementation.

OEPA Performance Standards:

- Involve the public with the SWMP updates.
- Five public involvement activities over the permit term.
- TMDL Performance Standard: The program shall, at a minimum, target each TMDL pollutant at least once.

The City recognizes that a successful storm water program relies not only on the MS4 owners and operators and the regulatory community, but also upon the input, assistance and understanding of the general public. The City's program includes means and methods to give the public opportunity to play an active role in both the development and implementation of the NPDES Phase II program.

The City's public involvement/participation programming must include at least five (5) public involvement activities over the permit term (one per permit year). Documentation of the number of people participating in events and a brief description of each activity is required by the permit.

Strategies

In order to increase public awareness, the City's program will be enhanced to include more active public participation. Given that, the City will reinforce existing methods for receiving information from the public and identify opportunities for school and civic groups to participate in the process. The City will encourage public participation in such events as the Mill Creek clean-up, high school rain garden maintenance, storm sewer marking and Water Plant tours.

Minimum Control Measure Evaluation

To evaluate the success of this portion of the overall program, the City will annually review the number of people that participate in the public events and review the tracking of water quality related concerns and complaints received by the City from the public. The program can be modified based upon the results of the annual review and determine if additional public events are needed to target specific audiences or stormwater themes.

MCM 2: Public Participation/Involvement Measurable Goals

- Provide at least five public involvement activities over the permit term in addressing the target audience and stormwater themes as identified within the Public Education/Outreach Minimum Control Measure.

- Annually, determine the effectiveness of the stormwater public participation/involvement program and modify as necessary to ensure that the target audiences are being appropriately reached.

Minimum Control Measure 2: Public Participation/Involvement

BMP	Description	Responsible Party	Target Audience	Target Pollutant	Implementation Year
SWMP Updates – Public Involvement	Present updates at public meeting • The City will review the SWMP that was prepared under the previous OEPA permit coverage term and update the plan to meet the current OEPA permit requirements and incorporate feedback received from the public.	City of Wyoming Public Works Department	Residents and Commercial Property Owners	• Fertilizers • HSTS discharges • Illicit discharges • Construction site stormwater runoff • Litter and other debris common within urban areas.	2022
Public Reporting Opportunities	City Maintained Website • Complaints received from the public by email, phone, or via the City's website are logged within a City maintained database. The database includes the complaint date, address, complaint description, and resolution summary. The database is used as a BMP to determine if common complaints are received from areas within the City where specific educational materials can be developed and distributed.	City of Wyoming Public Works Department	Residents and Commercial Property Owners	• Fertilizers • HSTS discharges • Illicit discharges • Construction site stormwater runoff • Litter and other debris common within urban areas.	2022-2026
Storm Drain Labeling	Continue to work with volunteers to label the MS4 storm sewer inlets to assist with the illicit discharge education effort. The City will determine the number of inlets that have been marked and note inlets that need marking.	City of Wyoming Public Works Department	Residents and Commercial Property Owners	• Illicit discharges	2022-2026
Stream Clean-up Events	Organize stream clean-ups for public participation to assist with water quality improvements.	City of Wyoming Public Works Department	Residents & General Public	• Litter and other debris common within urban areas.	2022-2026
Rain Garden Maintenance	The City will continue to participate and encourage public participation associated with the clean-up and maintenance of the high school rain garden and incorporate an educational component into the event.	City of Wyoming Public Works Department	Students	• Litter, and other debris common within urban areas	2022-2026
Water Plant Tours	The City will continue to offer Water Plant tours to students and incorporate stormwater quality within the overall program.	DSWCD	Students	• Fertilizers • HSTS discharges • Illicit discharges • Litter and other debris common within urban areas.	2022-2026

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

Per the OEPA NPDES permit requirements, the City is required to develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4.

OEPA Performance Standards:

- Develop and maintain a MS4 map.
- Adopt and enforce and illicit discharge prevention regulation.
- Develop and implement an IDDE plan.
- Maintain a list of home sewage treatment systems (HSTSs) connected or discharging into the MS4.
- Implement an MS4 outfall dry-weather screening program to assist with eliminating illicit discharges.
- Notify OPEA of detected illicit discharges associated with sanitary cross connections and leaking/broken sanitary lines.
- TMDL Performance Standard: Include an annual employee training which includes illicit discharge detection and elimination topic(s).

The City of Wyoming has minimized the potential for illicit discharges to the storm water system through development of an ordinance. The City has initiated an education program to increase public awareness of the storm water system and illicit discharge control. As the public education and outreach program results in greater awareness of the system, local citizens may become involved using the website to report illicit discharge locations.

The previous OEPA permit requires that the City's program must include or have included an initial dry-weather screening of all storm water outfalls over the permit term. The program must establish priorities and specific goals for long-term system-wide surveillance of its MS4, as well as for specific investigations of outfalls and their tributary area where previous surveillance demonstrates a high likelihood of illicit discharges. Data collected each year will be evaluated and priorities and goals will be revised annually based on this evaluation.

Strategies

The City has completed a storm water system map, including Home Sewage Treatment Systems (HSTS), and will continue to update as necessary throughout the permit period. An outfall inventory was completed by the Hamilton County Storm Water District (HCSWD) in 2010 for streams within the municipal boundary. Stormwater outfall dry weather screenings were conducted under the previous permit term. The City will concentrate additional screening efforts within selected parts of the community as described within the measurable goals section of this plan.

The control of illicit discharges is part of the City Code 933.04 (Hamilton County Storm Water District, Article II, Illicit Discharge Regulations). This section requires that with certain exceptions, only discharge composed entirely of storm water is permitted in the storm sewers. A copy of this regulation is provided within Appendix D.

The City will continue to provide education to residents and business owners associated with illicit discharge detection and elimination by distributing educational flyers/brochures and bring awareness to the community by continuing the storm sewer marking program. The City will additionally continue to work with the Hamilton County General Health District and notify them of noted failing HSTS's that are found to be discharging into the City's MS4.

The City has prepared and will continue to implement an Illicit Discharge Detection and Elimination (IDDE) Plan. A copy of the IDDE plan is provided within Appendix E. The City will notify the OEPA of detected illicit discharges associated with sanitary cross connections and leaking/broken sanitary lines. A copy of the OEPA notification form is provided within Appendix E. The City will annually train employees on IDDE procedures including documentation and reporting.

Minimum Control Measure Evaluation

To evaluate the success of this portion of the overall program, the City will review water quality concerns as reported on the City's maintained website and received calls. The City will continue to conduct dry-weather screenings of the of MS4 outfalls to inspect for illicit discharges. The results of the stormwater outfall dry weather screenings and compare the results to the screenings conducted under the previous SWMP. The program can be modified based upon the results of the review and determine if additional public education mechanisms are needed to target specific audiences or stormwater pollutants.

MCM 3: Illicit Discharge Detection and Elimination Measurable Goals

- Continue to implement and enforce the Illicit Discharge Detection and Elimination (IDDE) plan.
- Notify the OEPA when an illicit discharge source is associated with a broken sanitary sewer or if a cross-connection with the MS4 is noted.
- Conduct stormwater outfall dry weather screenings and address noted illicit discharges per the prepared IDDE plan.
- Update the City's MS4 map to identify the locations and types of post-construction water quality BMP's.
- Continue to provide means for the public to contact the City to report illicit discharge concerns and investigate and address the concerns per the IDDE plan.

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

BMP	Description	Responsible Party	Implementation Year
Ordinance/Regulation	Rules and regulations of the City of Wyoming Storm Water District, Article II, Illicit Discharge Regulations • Regulation prevents illicit discharges into the MS4. • The City Code provides enforcement capabilities if an illicit discharge into the MS4 is identified. A copy of the regulation is provided within Appendix D.	City of Wyoming Public Works Department	2022-2026
MS4 Map	The City will continue to maintain the MS4 map on an annual basis to ensure the required OEPA mapping components are properly identified and MS4 improvements are added resulting from constructed site improvement projects and field verification. An up-to-date map will assist the City with tracing sources of noted illicit discharges into the MS4 system and investigate surface water outfall locations. The MS4 map consists of the following components: • Storm pipes • Catch basins • Ditches • Stormwater management features • Public/Private water quality Best Management Practices • Stormwater outfall locations • Surface water locations and names	City of Wyoming Public Works Department	2021-2026
MS4 Map Updates	The City will update the MS4 map to identify and label the post-construction water quality Best Management Practice types.	City of Wyoming Public Works Department	2022-2026
IDDE Plan	The City has prepared an IDDE plan to assist with properly documenting and reporting noted illicit discharges and discharges reported by the public. The plan will be used throughout the NPDES permit period to enforce the City's Illicit Discharge Regulations. A copy of the IDDE plan is located within Appendix E.	City of Wyoming Public Works Department	2022-2026
Public Reporting	City Maintained Website • Complaints received from the public by email, phone, or the City's website are logged within a City maintained database. The database includes the complaint date, address, complaint description, and resolution summary. The database is used as a BMP to determine if common complaints are received from areas within the City where specific educational materials can be developed and distributed.	City of Wyoming Public Works Department	2022-2026
MS4 Outfall Dry-Weather Screening	The City screened the MS4 outfalls under previous permit. The City will evaluate the results of the previously conducted screenings to assist with determining outfall locations to be screened during the current permit period. • Conduct dry-weather screening of necessary outfalls. • Noted illicit discharges at MS4 outfalls will be further investigated to determine the source and the City will notify the responsible parties and required elimination actions per the IDDE plan.	City of Wyoming Public Works Department	2022-2026

BMP	Description	Responsible Party	Implementation Year
Illicit Discharge OEPA Notification	The City shall notify Ohio EPA if any of the following Illicit discharges are detected discharging to the MS4: • Illicit sanitary cross connections from industrial, commercial or multi-family sources • Leaking or broken sanitary sewer lines that are actively contributing sewage to the MS4 Notification shall include the location, general description, date, and approximate time the illicit discharge was discovered. Such notification shall be made to the appropriate Ohio EPA district office within twenty-four (24) hours of discovery of the source: A copy of the Oho EPA notification form is provided within Appendix E.	City of Wyoming Public Works Department	2022-2026
Training	The City will provide annual training to City service staff associated with illicit discharge detection and elimination, including the review of the IDDE plan procedures and Ohio EPA notification requirements.	City of Wyoming Public Works Department	2022-2026
Storm Drain Labeling Program	Continue to work with volunteers to label the MS4 storm sewer inlets to assist with the illicit discharge education effort. The City will determine the number of inlets that have been marked and note inlets that need marking. The City will annually track the number of volunteers and inlets marked.	City of Wyoming Public Works Department	2022-2026
Home Sewage Treatment System (HSTS) Maintenance Education	The City will continue to work with the Hamilton County General Health District with the identification of failing home sewage treatment systems. • To the City's knowledge, all septic tank systems drain to privately maintained stormwater conveyance systems. • The City will continue to conduct dry weather screenings at stormwater outfall locations and work with the Board of Health to eliminate noted illicit discharges as a result of failing HSTS's.	City of Wyoming Public Works Department	2022-2026

MCM 4: Construction Site Stormwater Runoff Control

Per the OEPA NPDES permit requirements, the City is required to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to the small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre.

OEPA Performance Standards:

- Adopt and enforce a regulation to require site operators to implement appropriate erosion and sediment controls along with requirements to control waste such as, but not limited to, discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause potential water quality impacts.
- Require developers to prepare and submit Storm Water Pollution Prevention Plans (SWP3's) to the City for review and approval. An objective tool such as software or checklist shall be used to document each SWP3 review.
- Establish procedures for receipt and consideration of information submitted by the public
- Conduct erosion and sediment control inspections on a minimum monthly bases and establish enforcement procedures. An objective tool such as software or checklist shall be used to document each site inspection.
- <u>TMDL Performance Standard:</u> At a minimum, applicable construction sites which have the following compliance issues shall be inspected once every 14 calendar days instead of on a monthly basis:

    1. Construction activities have started at the site with no SWP3 completed;
    2. Failure to install sediment basin(s) when the SWP3 and/or site drainage clearly indicate as a first step (within 7 days prior to grading and within 7 days of grubbing);
    3. Failure to implement any sediment/erosion controls; or
    4. Dewatering activities resulting in turbid discharges.

The City recognizes that sediment laden runoff from construction sites, if unchecked, can deposit more sediment and pollutants in a stream than would be deposited there over the course of decades from other land use types. The resulting siltation, and other pollutants, can cause physical, chemical, and biological harm to the waterways.

The City program includes the review of SWP3's and coordinating site improvement preconstruction meetings with developers and contractors to review their responsibilities associated with the SWP3 implementation. To ensure compliance, the City conducts erosion and sediment control inspections and has adopted means for enforcement to address noted violations.

Strategies

Section 933.04 of City code adopts an earth works/erosion and sediment control ordinance which regulates construction activity within the City. Section 933.04 also adopts a stream corridor protection policy.

The City relies on a two-fold approach to construction site runoff control. First, the City's Consulting Engineer will review the Storm Water Pollution Prevention Plans (SWP3s) for all submitted construction drawings within the City associated with land disturbing activities of 1 acre or more. City Code 933.04 (City of Wyoming Storm Water District, Article III, Earthwork Regulations) requires developers to prepare a SWP3 in accordance with the OEPA General Permit associated with construction site stormwater runoff. A copy of the City regulation is provided within Appendix F. Second, The City's Assistant Public Works Director will conduct monthly erosion and sediment control inspections to ensure that the approved SWP3 is being properly implemented. Inspection reports are prepared and submitted to the project contact. A copy of the inspection report to be completed is provided within Appendix H.

The City has additionally provided means for the public to report concerns regarding construction site runoff by means of the City maintained website. The City will track the concerns and investigate noted concerns to ensure that the construction site runoff is being properly maintained and illicit discharges addressed.

Minimum Control Measure Evaluation

To evaluate the success of this portion of the overall program, the City will track the number of SWP3s reviewed and site inspections conducted. The program can be modified based upon the results of the conducted inspections and determine if additional education mechanisms or enforcement procedures are needed in addressing construction site stormwater runoff.

MCM 4: Construction Site Stormwater Runoff Control Measurable Goals

- Review SWP3s that are submitted to the City to ensure compliance with the OEPA's NPDES General Permit associated with construction site discharges.
- Review construction site stormwater management requirements with developers and contractors at preconstruction meetings to ensure they understand their roles and responsibilities during the construction of the site improvements.
- Inspect all active construction projects within the City on a minimum monthly basis.
- Continue to provide means for the public to contact the City to report construction site runoff concerns and investigate and address the concerns.

Minimum Control Measure 4: Construction Site Stormwater Runoff Control

BMP	Description	Responsible Party	Implementation Year
Ordinance/Regulation	Rules and regulations of the City of Wyoming Storm Water District, Article III, Earthwork Regulations • Requires developers to prepare and submit SWP3's to the City for review and approval. A copy of the regulation is provided within Appendix F.	City of Wyoming Public Works Department	2022-2026
SWP3 Review	The City requires the preparation and submittal of SWP3s for site improvement projects that will result in land disturbing activities of 1 acre or more or are small but part of an overall larger common area of development that will result in the disturbance of 1 or more acres. • Review SWP3s that are submitted to the City to ensure compliance with the City's Earthwork Regulations and the OEPA's NPDES General Permit.	City of Wyoming Public Works Department and Consultant	2022-2026
SWP3 Review Checklist	The City uses a SWP3 checklist during the review of SWP3's. A checklist will be completed during each SWP3 review and kept on file. The checklist will be provided to the consultant preparing the plan and identify items that will need to be properly addressed prior to the City approving the plan. A SWP3 review checklist is provided within Appendix G.	City of Wyoming Public Works Department and Consultant	2022-2026
Site Improvement Preconstruction Meeting	Per the City's Earthwork Regulations, the City will meet with developers and contractors at site improvement preconstruction meetings and review Ohio EPA and City requirements associated with properly managing the stormwater runoff from the site during and post-construction to assist with illicit discharges into the City's MS4 and streams. • NPDES permit coverage • SWP3 overview • Inspection requirements • SWP3 modifications	City of Wyoming Public Works Department	2022-2026
Construction Inspection Program Escalation Plan	The City conducts erosion and sediment control site inspections for all active public and private projects where the City has reviewed and approved SWP3's. Inspection reports are prepared summarizing the inspection findings and identifies required action items the developer/contractor need to address in meeting the City's and Ohio EPA's stormwater management requirements. The City has developed a Construction Inspection Program Escalation Plan to assist with enforcing the requirements outlined within City's Earthwork Regulations. The plan outlines procedures associated with submitting Notice of Violations and seeking enforcement based upon the SWP3 observation results. • Erosion and sediment control inspection report is provided within Appendix H • Construction Inspection Program Escalation Plan is provided within Appendix I	City of Wyoming Public Works Department	2022-2026

BMP	Description	Responsible Party	Implementation Year
Public Reporting	City Maintained Website • The website additionally provides means for the public to report a stormwater concern.	City of Wyoming Public Works Department	2022-2026

MCM 5: Post-Construction Stormwater Management in New Development/Redevelopment

Per the OEPA NPDES permit requirements, the City is required to develop, implement, and enforce a program to address stormwater 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 or sale, that discharge into the MS4.

OEPA Performance Standards:

- Review and update the City's post-construction stormwater management regulations, if necessary, to meet the Ohio EPA's current NPDES general permit requirements.
- Complete checklists when reviewing SWP3's and conducting erosion and sediment control and post-construction BMP inspections.
- Develop a BMP as-built program to ensure the BMP's are constructed per the City approved SWP3's.
- Establish O&M agreements with post-construction operators to ensure BMP's will be properly inspected and maintained per the City's approved O&M plans.
- Inspect all BMP's installed within the City at least once over the permit term to ensure they are being properly maintained by the post-construction operator.
- Develop a plan to assist with the enforcement of the City's post-construction stormwater management regulations.
- TMDL Performance Standard: The post-construction storm water management program shall provide an educational opportunity to contractors, SWP3 designers, and/or employees on green infrastructure practices. In addition, the program shall include, at a minimum, one of the following performance standards:

    1. Retrofit one (1) existing storm water practice that solely provides a peak discharge function to meet the performance standard for an extended detention post-construction practice in accordance with the OEPA NPDES General Permit.
    2. Perform restoration of at least three hundred linear feet of channelized stream; or
    3. Update City code to require green infrastructure practices as identified within the OEPA NPDES General Permit where feasible; or
    4. Install one (1) or more green infrastructure BMPs to treat a minimum of 1 acre of existing impervious area developed prior to 2003.

The City is largely built out with very little new development. The City addresses the requirement for post-construction storm water management in new development and redevelopment with structural and non-structural BMPs, in keeping with the BMP requirements of the OEPA Construction General Permit, OHC00004. As part of this minimum control, the City seeks to effectively manage quantities of post development flow, diminish the impact of the amount of impervious cover within its system and enhance existing storm water practices through inclusion of water quality components. The City of Wyoming's code section 933.04 contains complete post-construction storm water management and stream corridor regulations (City of Wyoming Storm Water District, Article IV, Stream Corridor Regulations and Article V, Post-Construction Storm Water Quality Regulations). Copies of these regulations are provided within Appendix J and Appendix K.

The permit requires that the City's program include pre-construction storm water pollution prevention plan review of all projects from construction activities that result in a land disturbance of greater than or equal to one acre to ensure post-construction storm water management controls are designed per the City's requirements. These sites must be inspected to ensure such controls are installed per design. The City's program must also ensure that long-term operation and maintenance (O&M) plans are developed and agreements in place for these sites.

Strategies

The City relies on a two-fold approach to construction site runoff control. First, the City's Engineer will review the Storm Water Pollution Prevention Plans (SWP3s) for all submitted construction drawings within the City associated with land disturbing activities of 1 acre or more. City Code 933.04 (City of Wyoming Storm Water District, Article V, Post-Construction Storm Water Quality Regulations) requires developers to prepare a SWP3 in accordance with the OEPA General Permit associated with construction site stormwater runoff. Second, the project owner, or assigned post-construction operator, is required to facilitate an inspection and maintenance plan in addition to performing annual inspections which is required to be submitted to the City for review.

Minimum Control Measure Evaluation

To evaluate the success of this portion of the overall program, the City will track the number of SWP3s and O&M plans reviewed, Inspection and Maintenance agreements established and the number of annual BMP inspections conducted. The program can be modified if it is determined the plans are not being properly prepared and the required inspections conducted. Additional education to the development community may be necessary based upon the results of the program evaluation.

MCM 5: Post-Construction Stormwater Management Measurable Goals

- Review SWP3s and Operation and Maintenance plans that are submitted to the City to ensure compliance with City Code and the OEPA NPDES General Permit associated with construction site discharges.
- Review post-construction site stormwater management requirements with developers at preconstruction meetings to ensure they understand their roles and responsibilities associated with the inspection and maintenance of the water quality BMP.
- Ensure that the post-construction water quality BMPs are being properly inspected and maintained per the established agreement between the post-construction operator and the City.

Minimum Control Measure 5: Post-Construction Stormwater Management in New Development/Redevelopment

BMP	Description	Responsible Party	Implementation Year
Ordinance/Regulation	Rules and regulations of the City of Wyoming Storm Water District, Article V, Post-Construction Storm Water Quality Regulations • Requires developers to prepare and submit SWP3's to the City for review and approval. • Requires BMP's to be designed in accordance with the specification within the OEPA Rainwater and Land Development manual. • Requires developers to prepare and submit a BMP Operation and Maintenance (O&M) Plan. • Requires developer to enter into an agreement with the City to ensure that the constructed BMPs are properly inspected and maintained. A copy of the regulation is provided within Appendix K. Rules and regulations of the City of Wyoming Storm Water District, Article IV, Stream Corridor Regulations • Streams and riparian corridors are protected through the establishment of a Stream Corridor Protection Zone. A copy of the regulation is provided within Appendix J.	City of Wyoming Public Works Department	2022-2026
TMDL Performance Standard	In meeting the Ohio EPA TMDL TSS and TP performance standard, the City will evaluate the following options and incorporate one of these requirements over the permit coverage term: • Perform restoration of at least three hundred linear feet of channelized stream where natural channel stability and floodplain restoration will reduce stream erosion; or • Update your ordinance or other regulatory mechanism to require OEPA approved green infrastructure practices where feasible; or • Install one (1) or more green infrastructure BMPs to treat a minimum of 1 acre of existing impervious area developed prior to 2003.	City of Wyoming Public Works Department	2023-2026
SWP3 Review	The City requires the preparation and submittal of SWP3s for site improvement projects that will result in land disturbing activities of 1 acre or more or are small but part of an overall larger common area of development that will result in the disturbance of 1 or more acres. • Review SWP3s that are submitted to the City to ensure compliance with the City's Post-Construction Storm Water Quality Regulations. • Ensure that post-construction water quality BMPs are properly designed. • Ensure that Stream Corridor Protection Zones (SCPZs) are properly delineated on the SWP3 where applicable.	City of Wyoming Public Works Department and Consulting Engineer	2022-2026
SWP3 Review Checklist	The City uses a SWP3 checklist during the review of SWP3's. A checklist will be completed during each SWP3 review and kept on file. The checklist will be provided to the consultant preparing the plan and identify items that will need to be properly addressed prior to the City approving the plan. A SWP3 review checklist is provided within Appendix G.	City of Wyoming Public Works Department and Consulting Engineer	2022-2026

BMP	Description	Responsible Party	Implementation Year
O&M Plan	The City will requires preparation and submittal of O&M plans for site improvement projects that will result in land disturbing activities of 1 acre or more. • O&M plans are reviewed by the City to ensure compliance with the City's Post-Construction Storm Water Quality Regulations.	City of Wyoming Public Works Department and Consulting Engineer	2022-2026
Inspection and Maintenance (I&M) Agreement	The City will ensure that an I&M Agreement shall be made between the Owner and the City ensuring that the BMP(s) shall be properly inspected and maintained and shall be included within the Operation and Maintenance Plan. • The I&M agreement template is provided within Appendix L.	City of Wyoming Public Works Department	2022-2026
Site Improvement Preconstruction Meeting	Meet with developers and contractors at site improvement preconstruction meetings and review Ohio EPA and City requirements associated with properly managing the stormwater runoff from the site during and post-construction to assist with illicit discharges into the City's MS4 and streams. • NPDES permit coverage • SWP3 overview – construction of post-construction BMP • O&M plan overview • I&M agreement – inspection and reporting requirements	City of Wyoming Public Works Department and Consulting Engineer	2022-2026
BMP Inspections	The City will inspect all City and privately maintained BMP's where the City has approved an O&M plan at least once over the permit term. The City prepares inspection reports summarizing the inspection findings and note required maintenance action items. The reports are submitted to the post-construction operator and include a timeframe when the maintenance needs are required to be addressed.	City of Wyoming Public Works Department and Consulting Engineer	2022-2026
Enforcement	The City has established a Post-Construction Program Escalation Plan consisting of the following components to assist with the enforcement of the City's overall SWMP: • Inspection and reporting frequency • Notice of Violation notification procedures • Enforcement procedures A copy of the Post-Construction Inspection Program Escalation Plan is provided within Appendix M	City of Wyoming Public Works Department	2022-2026

MCM: 6 Pollution Prevention/Good Housekeeping for Municipal Operations

Per the OEPA NPDES permit requirements, the City is required to develop and implement an MS4 Operation & Maintenance (O&M) program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.

OEPA Performance Standards:

- Provide an annual employee training to prevent and reduce storm water pollution from activities resulting from municipal operations.
- Record keeping of potential pollutants distributed and removed within the City.
- Salt piles are to be covered in a manner so not exposed to precipitation and stormwater runoff.
- Secondary containment or bollard/barrier protection is to be installed around above ground brine or other alternative deicer storage tanks.
- Disturbed areas resulting from ditch maintenance activities are to be stabilized per the OEPA soil stabilization requirements outlined within the construction stormwater management NPDES general permit.
- TMDL Performance Standard: The program shall include, at a minimum, one of the following performance standards. Implementation of this permit requirement shall commence no later than two (2) years after the effective date of this permit:
    a. Develop and implement a proactive street sweeping program with proper debris management and disposal. At a minimum, sweeping shall occur on curbed streets two times per year; or
    b. Develop and implement a catch basin cleaning program with proper debris management and disposal. At a minimum, catch basins shall be scheduled to be cleaned once every five years; or
    c. Develop and implement a leaf/yard waste collection program; or
    d. Conduct routine maintenance facility SWP3 inspections on a minimum quarterly basis.

Strategies

The City has a variety of procedures in place to provide 'good housekeeping'. These procedures include the following:

- The proper disposal of waste oils and greases used in the City's maintenance facilities;
- The careful use of salt during snow removal periods using measures appropriate to conditions;
- The enclosed storage of the City's salt stockpile;
- Very limited pesticide/herbicide use on City-owned property;
- Very limited fertilizer use on City-owned property;
- Removal of pollutants from City maintained streets.

The City will continue to conduct inspections at the maintenance facility to determine if the BMPs are being properly implemented per the prepared SWP3.

Salt is temporarily stored adjacent to the City Public Works garage in a manner so it is not exposed to stormwater. Truck equipment is regularly maintained and calibrated to ensure that the salt that is being spread is not over applied. Weather conditions are closely monitored to ensure that timing and amount of salt is being properly applied. Attention is focused on roads with steep grades. Level roads receive significantly less salt.

Fertilizer is stored in a manner so it is not exposed to stormwater. Material is spread per the manufacturer's recommendations. Weather conditions are closely monitored. Application of material onto impervious areas is avoided. The City stores/applies herbicide/pesticide in a similar manner. In all cases, Wyoming uses a person with a commercial applicator's license for the work – or it is contracted out to a company with such a license. Application of chemicals is kept minimal to protect the environment. No applications are done near streams or waterways per regulations.

The City will continue to take advantage of any training opportunities presented by state or local agencies whenever possible associated with municipal activities and operations water quality improvements. Performance standards under the permit require, at a minimum, one annual employee training.

Minimum Control Measure Evaluation

To evaluate the success of this portion of the overall program, the City will annually review the tracking of pollutants applied, collected, and properly disposed of as part of the City's routine municipal operations. Tracking results will be evaluated to determine if pollutant source applications can be reduced or additional pollutants removed prior to mixing with stormwater and flowing into the MS4. The City will additionally track training events attended the inspections conducted at the City maintenance facility. Inspection results will be reviewed a determination made if BMPs are in need of maintenance or additional BMPs implemented to improve water quality.

Pollution Prevention Measurable Goals

- 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.

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

BMP	Description	Responsible Party	Implementation Year
City Staff Training	Provide an annual training to City service staff to review Best Management Practices that can be incorporated within their daily activities to assist with stormwater pollution prevention. • Maintenance facility SWP3 review • Spill response, containment, report • MS4 maintenance activities • Ohio EPA annual report tracking • IDDE reporting procedures	City of Wyoming Public Works Department	2022-2026
Maintenance Facility Inspections	Maintenance facility inspections shall be conducted on a quarterly basis to ensure that the SWP3 prepared for the facility is being properly implemented and to determine if SWP3 updates are required to address new pollutant sources and BMP's.	City of Wyoming Public Works Department	2022-2026
MS4 Maintenance – Street Sweeping	Street sweeping shall occur on curbed streets two times per year. Collected pollutants shall be properly disposed of at a NPDES permitted facility.	City of Wyoming Public Works Department	2022-2026
MS4 Maintenance – Catch Basins and Underground Water Quality Structures	Storm sewer catch basins and City maintained water quality structures are inspected and collected pollutants removed from the MS4. All catch basins shall be scheduled to be cleaned at least once every five years. Collected pollutants shall be properly disposed of at a NPDES permitted facility.	City of Wyoming Public Works Department	2022-2026
MS4 Maintenance – Ditch Maintenance	For areas of soil disturbance associated with ditch/MS4 maintenance, soil stabilization shall, at a minimum, be initiated in accordance with the time frames identified within the Ohio EPA NPDES general permit associated with construction site runoff management.	City of Wyoming Public Works Department	2022-2026
Disposal of Wastes	The City has established a program for the proper collection, disposal, and tracking of solid waste, recyclables, and yard waste. Collected pollutants shall be properly disposed of at a NPDES permitted facility.	City of Wyoming Public Works Department	2022-2026
Road Salt	The City monitors weather and road surface conditions to determine the appropriate salt application rates in order to minimize usage. Salt is stored within the covered building to minimize exposure to rain and run-on.	City of Wyoming Public Works Department	2022-2026
Pesticide & Herbicide	Pesticides and herbicides are applied in designated targeted areas by certified contractors based upon the manufacturer recommended application rates. Weather conditions are monitored prior to applications to minimize runoff into storm sewer systems and surface waters. Pesticides and herbicides are stored within a manner not to be exposed to rain or run-on.	City of Wyoming Public Works Department	2022-2026

BMP	Description	Responsible Party	Implementation Year
Fertilizer	Fertilizers are applied in designated targeted areas based upon the manufacturer recommended application rates. Weather conditions are monitored prior to applications to minimize runoff into storm sewer systems and surface waters. Fertilizes are stored within a manner not to be exposed to rain or run-on.	City of Wyoming Public Works Department	2022-2026
Flood Management Projects	The City will assess new flood management projects for impacts on water quality for incorporation of additional water quality protection devices or practices. Water quality BMP's will be designed in accordance with Ohio EPA specifications.	City of Wyoming Public Works Department	2022-2026

Figure 1

Table of Organization

Figure 1 - Table of Organization

STORMWATER PROGRAM ADMINISTRATOR

Mike Lippert
Assistant Public Works Director/Water Works Director
(513) 821-0037
mlippert@wyomingohio.gov

PROGRAM SUPPORT

EMH&T
City Contracted Consultant

MCM 1

Public Education and Outreach on Stormwater Impacts

Mike Lippert
Assistant Public Works Director/Water Works Director

Karen Zeilman
Director of Administration
(513) 821-7600
kzeilman@wyomingohio.gov

Debby Martin
Executive Assistant
(513) 821-7600
dmartin@wyomingohio.gov

MCM 2

Public Involvement/ Participation

Mike Lippert
Assistant Public Works Director/Water Works Director

Karen Zeilman
Director of Administration
(513) 821-7600
kzeilman@wyomingohio.gov

Debby Martin
Executive Assistant
(513) 821-7600
dmartin@wyomingohio.gov

MCM 3

Illicit Discharge Detection and Elimination (IDDE)

Mike Lippert
Assistant Public Works Director/Water Works Director

Rob Nicolls
Public Works Director
(513) 821-3505
rnicolls@wyomingohio.gov

Megan Statt Blake
Community Development Director
(513) 821-7600
mstattblake@wyomingohio.gov

Dennis Brown
Fire Chief
(513) 842-1357

Brooke Brady
Police Chief
(513) 821-0141

MCM 4

Construction Site Stormwater Runoff Control

Mike Lippert
Assistant Public Works Director/Water Works Director

Megan Statt Blake
Community Development Director
(513) 821-7600
mstattblake@wyomingohio.gov

City Contracted Consultant
- SWP3 Reviews

MCM 5

Post-Construction Stormwater Management in New Development and Redevelopment

Mike Lippert
Assistant Public Works Director/Water Works Director

Megan Statt Blake
Community Development Director
(513) 821-7600
mstattblake@wyomingohio.gov

City Contracted Consultant
- SWP3 Reviews

MCM 6

Pollution Prevention/Good Housekeeping for Municipal Operations

Mike Lippert
Assistant Public Works Director/Water Works Director

Rob Nicolls
Public Works Director
(513) 821-3505
rnicolls@wyomingohio.gov

Kevin Lewallen
Crew Leader
(513) 821-3505

Adam Howard
Garage Mechanic
(513) 821-3505

Appendix A

Resolution No. 25-2009 and Ordinance No. 24-2009

CITY OF WYOMING • 800 OAK AVENUE • WYOMING, OHIO 45215
(513) 821-7600
FAX (513) 821-7952

December 30, 2009

Hamilton County
Board of County Commissioners
138 East Court Street, Rm 603
Cincinnati, Ohio 45202

Honorable Commissioners:

The City of Wyoming is currently a signatory to the General Plan of Drainage, which is the framework of the Hamilton County Regional Storm Water District. At the June 15, 2009 Wyoming City Council meeting, the Council adopted a report recommending that the City withdraw from the Regional Storm Water District. A letter was sent to Board of County Commissioners dated August 19 providing notice of the intent to withdraw from the District. At the September 21, 2009 meeting City Council adopted a resolution (attached) withdrawing from the Stormwater District consistent with Section III, District Boundary on page 4, in paragraph 3, provides the guidelines for withdrawal from the District.

The City's official last date in the Hamilton County Regional Stormwater District shall be December 31, 2010.

Please feel free to contact me if there are questions about the City's intent.

Yours truly,

Robert W. Harrison

Robert Harrison
City Manager

Cc: Todd Long, Hamilton County Stormwater District
Mike Lippert, Wyoming Assistant Public Works Director

RESOLUTION NO. 25 -2009

RESOLUTION AUTHORIZING THE CITY OF WYOMING TO WITHDRAW FROM THE HAMILTON COUNTY STORM WATER MANAGEMENT DISTRICT

WHEREAS, the City of Wyoming pursuant to Ordinance No. 24-2009 passed on August 17, 2009 adopted Rules and Regulations for illicit discharges, earthworks, stream corridors and post construction water quality to apply to the City of Wyoming; and

WHEREAS, the City of Wyoming is a party to an agreement with the Hamilton County Storm Water Management District and wishes to withdraw from the Hamilton County Storm Water Management District in light of the City of Wyoming's creation of its own Storm Water District Rules and Regulations.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF WYOMING, HAMILTON COUNTY, OHIO:

Section 1. The City Council does hereby direct the City Manager to take any and all necessary actions to notify Hamilton County that the City of Wyoming is withdrawing from the Hamilton County Storm Water District and to take any other such action necessary to affect such withdrawal.

PASSED IN THE COUNCIL CHAMBERS OF THE CITY OF WYOMING, OHIO, THIS 21st DAY OF SEPTEMBER, 2009.

Barry S. Porter, Mayor

ATTEST:

Patricia A. Calvert
Clerk of Council

APPROVED AS TO FORM:

Franklin A. Klaine, Jr., City Solicitor

1989493_1.DOC

Mike

ORDINANCE NO. 24 -2009

ORDINANCE ADOPTING THE HAMILTON COUNTY STORM WATER DISTRICT RULES AND REGULATIONS AS THE CITY OF WYOMING'S RULES AND REGULATIONS FOR ILLICIT DISCHARGES, EARTH WORKS, STREAM CORRIDORS AND POST CONSTRUCTION WATER QUALITY

WHEREAS, it is necessary in the City of Wyoming to adopt rules and regulations for illicit discharges, earth works, stream corridors and post construction water quality; and

WHEREAS, the Hamilton County Storm Water District Rules and Regulations are attached hereto as Exhibit A consisting of Articles I-V which the City of Wyoming wishes to adopt as the City of Wyoming's Rules and Regulations for illicit discharges, earth works, stream corridors and post construction water quality; and

WHEREAS, the Rules and Regulations attached hereto as Exhibit A shall apply to the City of Wyoming; and

WHEREAS, the purpose of these Rules and Regulations is to provide for the health, safety and general welfare of the citizens of the City of Wyoming.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF WYOMING, OHIO:

Section 1. The City Council does hereby adopt the Rules and Regulations for illicit discharges, earth works, stream corridors and post construction water quality as set forth in the attached Exhibit A consisting of Articles I-V.

Section 2. The City of Wyoming hereby agrees to enforce these Rules and Regulations within the City of Wyoming corporate boundaries and hereby agrees to report enforcement actions to the District in an approved format.

Section 3. The Council hereby agrees to use all necessary authorities it possesses to assist the District to enforce these Rules and Regulations within the City of Wyoming jurisdictional boundaries.

Section 4. That any person, firm or other entity that has violated or continues to violate the Rules and Regulations shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of $1,000 per violation per day and/or imprisonment for a period of time not to exceed 80 days.

Section 5. The City of Wyoming may recover all attorneys' fees, court costs and other expenses associated with the enforcement of the Rules and Regulations

including but not limited to sampling and monitoring expenses.

Section 6. That the remedies listed in this ordinance 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 7. That the provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence or paragraph of this ordinance 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 is ordinance.

Section 8. That the Clerk of the City Council is hereby directed to certify a copy of this ordinance to the Board of County Commissioners of Hamilton County.

Section 9. This ordinance shall go into effect the first date permitted by law.

PASSED IN THE COUNCIL CHAMBERS OF THE CITY OF WYOMING, OHIO, THIS ~~15th~~ 17th DAY ~~JUNE~~ AUGUST, 2009.

Barry S. Porter, Mayor

ATTEST:

Patricia Calvert

Clerk of Council

APPROVED AS TO FORM:

Franklin A. Klaine, Jr., City Solicitor

1914390_1.DOC

Appendix B

OEPA NPDES Permit Coverage Approval

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

May 25, 2021

CITY OF WYOMING
MIKE LIPPERT
800 OAK AVE
WYOMING, OH 45215

Re: Approval Under Ohio EPA National Pollutant Discharge Elimination System (NPDES) - Small MS4 General Permit - OHQ000004

Dear Applicant,

Your NPDES Notice of Intent (NOI) application is approved for the following facility/site. Please use your Ohio EPA Facility Permit Number in all future correspondence.

Facility Name:	CITY OF WYOMING
Facility Location:	800 OAK AVE
City:	WYOMING
County:	Hamilton
Township:	SPRINGFIELD
Ohio EPA Facility Permit Number:	1GQ00070*CG
Permit Effective Date:	May 25, 2021
Permit Expiration Date:	Mar 31, 2026

Please read and review the permit carefully. The permit contains requirements and prohibitions with which you must comply. Coverage under this permit will remain in effect until a renewal of the permit is issued by the Ohio EPA.

A copy of the general permit may be viewed or downloaded rom the following web address: http://epa.ohio.gov/dsw/permits/gpfact.aspx
To view your electronic submissions and permits please Logon in to the Ohio EPA's eBusiness Center at http://ebiz.epa.ohio.gov.

If you need assistance or have questions please call (614) 644-2001 and ask for Small MS4 General Permit support or visit our website at http://www.epa.ohio.gov.

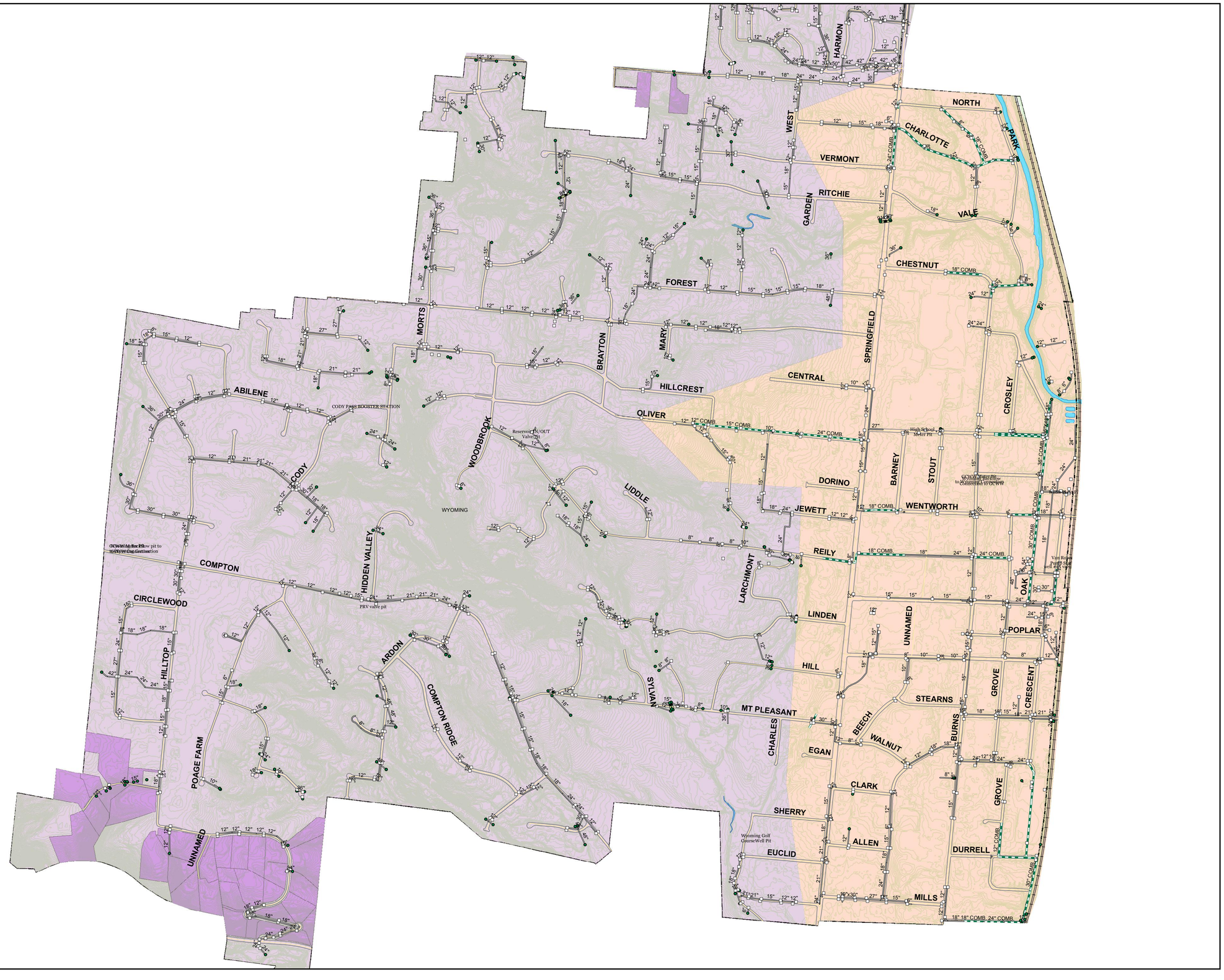
Sincerely,

Laurie A. Stevenson
Director

Appendix C

MS4 Map

CITY OF WYOMING STORM SEWER & WATER FACILITIES



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45	44	43	42	41	40	39	38	37
36	35	34	33	32	31	30	29	28
27	26	25	24	23	22	21	20	19
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9	8	7	6	5	4	3	2	1

Legend

- CatchBasins
- OutFalls
- Combined Sanitary and Storm Lines
- NONCombined_sewer_Area
- Combined_sewer_Area

DATE	REVISIONS

Appendix D

Illicit Discharge Regulations

RULES AND REGULATIONS
OF THE
CITY OF WYOMING STORM WATER DISTRICT
WYOMING, OHIO

ARTICLE II

ILLICIT DISCHARGE REGULATIONS

TABLE OF CONTENTS

201 PURPOSE, SCOPE, AND APPLICABILITY

A. The purpose of these Illicit Discharge Regulations is to promote and maintain the health, safety, and welfare of the citizens of by establishing standards for storm water best management practices (BMPs) that minimize the degradation of the water resources of the City of Wyoming by

1. Reducing the discharge of pollutants from the municipal separate storm sewer system (MS4) owned or operated by the City of Wyoming to the maximum extent practicable,

2. Protecting water quality, and

3. Satisfying the appropriate water quality requirements of the Clean Water Act, Ohio Law, and the Ohio Revised Code (ORC), including Section 6111.

B. The intent of these Illicit Discharge Regulations is:

1. To regulate the discharge of any Pollutant to a MS4;

2. To prohibit and eliminate Illicit Connections and Discharges to the MS4; and

3. To establish legal authority to perform all inspection, surveillance, testing, monitoring and enforcement necessary to ensure compliance with these Illicit Discharge Regulations.

C. These Illicit Discharge Regulations are adopted under authority of Ohio Law and the Ohio Revised Code, including Chapters 307 and 6117 thereof, and implement the requirements of the latest discharge permit issued by Ohio EPA to the City of Wyoming under the Phase II Program.

D. The City of Wyoming shall designate the ***Enforcing Official*** for purposes of enforcing these Illicit Discharge Regulations.

E. These Illicit Discharge Regulations apply to the MS4 within the boundary of the City of Wyoming.

202 DEFINITIONS

The words and phrases as defined in Article I - Definitions of the Rules and Regulations of the City of Wyoming shall have the same meaning herein unless otherwise provided.

203 COMPLIANCE WITH OTHER LAWS AND DISCLAIMER OF LIABILITY

A. Compliance with these Illicit Discharge Regulations does not relieve any Person from the duty to comply with any other applicable federal, state, and local laws, regulations or ordinances or from responsibility otherwise imposed by law for damage to any person or property.

B. Neither the compliance or lack of compliance with these Illicit Discharge Regulations; nor any action or lack of action by the ***Enforcing Official*** shall relieve a Person from responsibility for injury or damage to any person or property otherwise imposed by law, nor create or impose any liability upon the City of Wyoming or their respective officers, agents, or employees for injury or damage to any person or property.

C. Failure of the ***Enforcing Official*** to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the Owner from the responsibility for the resulting condition or damage or injury, and shall not result in the ***Enforcing Official***, the City of Wyoming, their officers, employees, or agents being responsible for any resulting condition or damage or injury.

D. These Illicit Discharge Regulations do not create a duty upon the ***Enforcing Official***, or the City of Wyoming to any person impacted by any storm water or storm water BMPs required by these Illicit Discharge Regulations.

204 CONFLICTS AND SEVERABILITY

A. Where these Illicit Discharge Regulations may conflict with other applicable provisions of law or ordinance, it is the City's intent that the more restrictive applicable provisions, shall prevail where permitted by law.

B. Should any article, section, subsection, clause, or provision of these Illicit Discharge Regulations be declared by a court of applicable jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the remainder of these Illicit Discharge Regulations, in whole or in part.

205 PROHIBITION OF ILLICIT DISCHARGES REQUIRED

A. No Person shall discharge, cause or threaten to discharge, or allow another Person under its control to discharge, cause or threaten to discharge to the MS4 any Pollutant or water containing any Pollutant other than Storm Water.

206 EXEMPTIONS

A. The following Non-Storm Water sources are exempt from the prohibitions in Section 205(A):

1. Water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR §35.2005(20)), 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, non-commercial car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, and discharges or flows from fire fighting activities.

2. Water associated with dye testing, provided the dye has been approved by the ***Enforcing Official*** and prior written notification has been provided to the ***Enforcing Official*** of the day and time of the testing.

3. Non-Storm Water discharges to the MS4 permitted under a valid NPDES permit, waiver, or waste Discharge order issued to the discharger and administered under the authority of the United States or Ohio Environmental Protection Agency, provided that the discharger is in compliance with all requirements of the permit or order and written approval has been granted by the appropriate jurisdiction for any such discharge or connection to the MS4.

4. Discharges from an Off-Lot Home Sewage Treatment System (HSTS) installed and in operation prior to or on the effective date of these Illicit Discharge Regulations, provided the Off-Lot HSTS is properly functioning and is not a public heath nuisance as determined by a Board of Health with applicable jurisdiction.

B. Application and enforcement of the exemptions under Section 206 EXEMPTIONS of these Illicit Discharge Regulations shall be conducted by the ***Enforcing Official***.

207 INSPECTION AND MONITORING OF DISCHARGES AND CONNECTIONS

A. The ***Enforcing Official*** bearing proper credentials and identification shall be permitted at all reasonable times to enter upon all properties to inspect, survey, test, photograph or videotape a MS4 connection or discharge to determine compliance with these Illicit Discharge Regulations or whether a MS4 connection or discharge exists. The ***Enforcing Official*** shall be granted access without unreasonable delay. Any obstruction preventing safe and easy access to the MS4 connection or discharge (or suspected MS4 connection or discharge) shall be promptly removed or cleared upon request of the ***Enforcing Official***, and in the case of a confirmed MS4 connection or discharge, shall not be replaced or allowed to reoccur. The cost of removing or clearing obstructions shall be the responsibility of the property owner or operator. The ***Enforcing Official*** shall be entitled to examine and copy any records required to be prepared and maintained under these Illicit Discharge Regulations or applicable permit.

208 NOTIFICATION OF ILLICIT DISCHARGE FROM UNLAWFUL DUMPING OR SPILLING

A. As soon as the person responsible for a facility or premises, or the emergency response coordinator for a facility or premises has knowledge of an Illicit Discharge resulting from unlawful dumping or spilling that contains a Hazardous Substance, the person or emergency coordinator shall immediately notify the ***Enforcing Official*** by telephone, and the appropriate emergency response center and other governmental agencies in accordance with applicable release reporting laws of such Illicit Discharge. The Owner or operator of the facility or premises shall take all reasonable steps to ensure the expedient containment and cleanup of such Illicit Discharge, protect the heath and safety of the public and mitigate damage to the environment and MS4. A follow up written report describing in detail the incident, impacts and actions taken

shall be submitted to the ***Enforcing Official*** within seven (7) working days of the telephone notification to the ***Enforcing Official*** (a copy of the written report submitted to the National Response Center or other governmental agency may satisfy this requirement).

B. As soon as the person responsible for a facility or premises, or the emergency response coordinator for a facility or premises has knowledge of an Illicit Discharge resulting from unlawful dumping or spilling that does not contain a Hazardous Substance, the responsible person or emergency coordinator shall provide notice to the ***Enforcing Official*** by telephone or facsimile as expeditiously as possible, but no later than the next business day. A follow up written report describing in detail the incident, cause, impacts and actions taken shall be submitted to the ***Enforcing Official*** within seven (7) working days of the notification to the ***Enforcing Official***.

C. If an Illicit Discharge resulting from unlawful dumping or spilling is from a commercial or industrial establishment, the Owner or operator of such establishment shall retain on-site for three (3) years from the date of such Illicit Discharge a written record of such Illicit Discharge and the actions taken to mitigate the effects and prevent a recurrence.

209 SWIMMING POOL DISCHARGES

A. No Person shall discharge backwash water from the cleaning of private residential swimming pool filtration medium and/or filter elements to the MS4.

B. The discharge of non-backwash water from private residential swimming pools to the MS4 is allowed, provided the swimming pool water is dechlorinated by resting the water for at least 48 hours following the addition of chlorine or the chlorine level is below 0.1 milligrams per liter (mg/L). Chlorine may be tested using a standard swimming pool water chlorine test kit. In addition, the pH (a measurement of acidity) of any non-backwash swimming pool water discharged to the MS4 shall not be less than 6.5 or greater than 8.5 at the time of the discharge to the MS4. The pH may be measured with a standard swimming pool water pH test kit.

210 HOME SEWAGE TREATMENT SYSTEM (HSTS) DISCHARGES

A. The discharge from an Off-Lot Home Sewage Treatment System (HSTS) to the MS4 is prohibited except where permitted by the Hamilton County General Health District. The discharge from an improperly functioning Off-Lot HSTS or On-Lot HSTS is prohibited under any circumstances.

211 ILLICIT CONNECTION PROHIBITIONS

A. No Person shall connect or cause to be connected any pipe, ditch, drain, conveyance, device, outlet or accessory directly or indirectly to the MS4 that will discharge any Pollutant or water containing any Pollutant other than Storm Water into the MS4.

B. No Person shall construct, use, operate, maintain or otherwise continue in existence an Illicit Connection.

212 RIGHTS UNAFFECTED

A. These Illicit Discharge Regulations shall not limit or abridge any rights of action or remedies either at law or in equity, nor do these Illicit Discharge Regulations, or any act done pursuant to these Illicit Discharge Regulations preclude any governmental entity or person from exercising rights which they may otherwise possess under applicable law.

213 ENFORCEMENT AND PENALTIES

A. It shall be unlawful for any Person to fail to comply with any of the requirements of these Illicit Discharge Regulations or any lawful order issued by the ***Enforcing Official*** pursuant thereto, including the failure to pay any authorized civil penalty lawfully issued hereunder.

B. The ***Enforcing Official*** shall have all such rights and powers in interpreting and enforcing these Illicit Discharge Regulations as may be accorded to such officials by law, rule, or regulation.

C. When the ***Enforcing Official*** determines that a Person has or may have violated any requirement of these Illicit Discharge Regulations, the ***Enforcing Official*** may notify the responsible Person and/or Owner by mailing or delivering a written notice of violation (NOV) to the responsible Person and/or Owner. The NOV shall state and describe the violation and, when appropriate, shall establish a deadline for compliance with these Illicit Discharge Regulations. The NOV may also include or be accompanied by orders that require:

1. The performance of monitoring, testing, sampling, analyses, and reporting,

2. The elimination of an Illicit Connection or Illicit Discharge,

3. That a violating discharge, practice, or operation cease and desist,

4. The abatement or remediation of contamination hazards and the restoration of any affected property, including the MS4, and

5. The implementation of control measures determined by the ***Enforcing Official*** to be necessary to ensure compliance with these Illicit Discharge Regulations.

D. A requirement to implement control measures may be in addition to any prosecution or enforcement for fines, costs or other remedies as may be available to the ***Enforcing Official*** under applicable law.

E. The NOV may include a civil penalty to be paid within a time prescribed by the ***Enforcing Official*** where authorized by applicable law.

F. If the responsible Person violates any provision of these Illicit Discharge Regulations, fails to correct a violation, or fails to comply with any order or established deadline, or fails to pay an authorized civil penalty within the time prescribed, the ***Enforcing***

Official may seek enforcement and recovery of penalties and costs in a court of competent jurisdiction, in addition to pursuing any available civil and/or criminal penalties or damages as may be recoverable under applicable laws, rules or regulations.

214 INJUNCTIVE RELIEF

A. In addition to seeking civil and/or criminal penalties and/or damages for any violation, the ***Enforcing Official*** may petition a court of competent jurisdiction for injunctive relief, which may include, but is not limited to, enforcement of these Illicit Discharge Regulations or any NOV, order or penalty issued by the ***Enforcing Official***, restraining any continuing or threatened future violations of these Illicit Discharge Regulations, ordering the abatement of any violation or threatened violation, compelling remediation of contamination hazards and restoration of any affected property, including the MS4, or any other relief, penalty or costs that justice may require.

215 VIOLATIONS CONSIDERED A PUBLIC NUISANCE

A. A violation of these Illicit Discharge Regulations which threatens the public health, safety, or welfare may constitute a public nuisance under applicable law, subject to abatement by the ***Enforcing Official*** or other appropriate authority, or by civil action to abate or enjoin, as may be available under applicable law, rule or regulation.

216 REMEDIES NOT EXCLUSIVE

A. The remedies provided in these Illicit Discharge Regulations shall not be exclusive of any other remedies available under any applicable federal, state or local law, and it is within the discretion of the ***Enforcing Official*** to seek cumulative remedies.

217 APPEALS

A. Any person wishing to appeal an adverse determination of the ***Enforcing Official*** shall be entitled to such appeals as may be accorded under applicable provisions of Ohio Law and the Ohio Revised Code.

Appendix E

IDDE Plan

CITY OF WYOMING, OHIO
ILLICIT DISCHARGE DETECTION AND ELIMINATION PLAN

December, 2015

Table of Contents

SECTION 1.0 Introduction

The purpose of this document is to supplement the regulations established by the City of Wyoming, Ohio to provide for the health, safety, and general welfare of the citizens of the City through the regulation of illicit discharges to the Municipal Separate Storm Sewer System (MS4). The regulations establish methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process as required by the Ohio Environmental Protection Agency (Ohio EPA).

This document outlines the processes that the City is taking to address concerns and water quality issues related to illicit discharges within their jurisdiction and as defined in their current NPDES permit issued through Ohio EPA.

Substantial investments in time, money, and energy have contributed to the progress made to date with defining and documenting the issues surrounding illicit discharges. These efforts have involved identifying the locations of HSTS throughout City, field verification and dry weather screening (DWS) of MS4 outfalls, defining and evaluating the MS4, establishing ordinances and regulations, conducting community education and outreach, and educating city staff in best management practices regarding storm water.

The NPDES Small MS4 Stormwater General Permit (OHQ000003) defines the area of responsibility of the permittee to the locations that meet two requirements; the area of responsibility that includes the MS4s, which the permittee owns and/or operates.

SECTION 2.0 General Permit Information

This document was produced in accordance with the most current NPDES Small MS4 Stormwater General Permit issued to the City by Ohio EPA. This document is subject to periodic updates as progress is made with the various requirements of the permit and as OEPA clarifies or modifies the language of the permit.

In accordance with Part III of the General Permit, a Stormwater Management Program (SWMP) was developed to outline the methodology and rational to be used to satisfy the appropriate water quality requirements of Ohio Revised Code (ORC) Chapter 6111 on water pollution control and the Federal Clean Water Act. This SWMP includes management practices, control techniques, system designs, and engineering methods and addresses the following six Minimum Control Measures (MCM):

1) Public education and outreach
2) Public participation / involvement,
3) Illicit discharge detection and elimination (IDDE)
4) Construction site runoff control
5) Post-construction runoff control
6) Pollution prevention / good housekeeping for municipal operations.

This document is required as specified in Part III, Section 3.e of the General Permit.

SECTION 2.1 Supporting Documents and Legal Authority

This document does not stand in isolation. It is part of a larger storm water management effort and as such, should be considered in coordination with the following documents and programs:

- Federal Clean Water Act
- NPDES Small MS4 Stormwater General Permit (OHQ000003)
- City of Wyoming, Ohio Storm Water District Rules and Regulations (Codified Ordinances of Wyoming, Ohio Section 933.04)

SECTION 2.2. Coordinating Agencies and Departments

This document reflects the cooperative effort by several departments and agencies dedicated to addressing public health issues and protecting and managing water resources. The following partner agencies are involved with this effort:

- Hamilton County Soil & Water Conservation District
- Hamilton County General Health District

SECTION 3.0 Decision Process and Rationale

This IDDE Plan was produced in accordance with requirements set forth in the current NPDES Small MS4 Stormwater General Permit. The intent of the actions taken and planned are to provide for the health, safety, and general welfare of the citizens of the City of Wyoming through the regulation of illicit discharges to the MS4. The objectives of these efforts are: to prohibit illicit discharges and illegal connections to the MS4; and, to utilize legal authority to carry out inspections, monitoring procedures, and enforcement actions necessary to ensure compliance with applicable regulations. These regulations apply to all residential, commercial, industrial, or institutional facilities responsible for discharges to the MS4 except for those discharges exempted from regulation. These regulations do not apply to areas served by combined sewers in the City of Wyoming as shown in the included map.

The Stormwater Management Code found in Section 933.04 defines the prohibitions, exclusions, responsibilities, monitoring of illicit discharges and illegal connections, and enforcement processes associated with illicit discharges for the City. The Stormwater Management Code outlines communication activities and target audiences associated with requirements of the NPDES Permit and outlines topics associated with IDDE efforts being undertaken by the City. Regarding discharges from HSTS, the City maintains an active relationship with Hamilton County General Health District for inspecting systems and enforcement measures consistent with their legal authorities.

SECTION 3.1 Illicit Discharge: Definition

Stormwater regulations define an "illicit discharge" as any discharge to a MS4 that is not composed entirely of stormwater. Common sources of non-stormwater, dry weather discharges in urban areas include, but are not limited to, apartments and homes, car washes, restaurants, airports, landfills, and gas stations. These so-called "generating sites" discharge sanitary wastewater, septic system effluent, vehicle wash water, washdown from grease traps, motor oil, antifreeze, gasoline and fuel spills, among other substances.

Although these illicit discharges can enter the storm drain system in various ways, they generally result from either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the storm drain system, spills, or "midnight dumping"). Illicit discharges can be further divided into those discharging continuously and those discharging intermittently.

SECTION 3.2 MS4 Definition

The Stormwater Management Code defines MS4s as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

A. Owned or operated by the City;
B. Designed or used for collecting or conveying stormwater;
C. Which is not a combined sewer; and,
D. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 C.F.R. 122.2.

SECTION 3.3 Illicit Discharge Exemptions

Illicit Discharge is defined as any discharge to an MS4 that is not composed entirely of storm water, except for those discharges to an MS4 pursuant to a NPDES permit or noted in the Stormwater Management Code.

The following discharges are exempt until such time as they are determined by the City to be significant contributors of pollutants to the MS4.

- 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
- uncontaminated discharge of flow from foundation drain, crawl space or footing drains
- discharges from potable water sources
- air conditioning condensate
- non-commercial car washing
- flows from riparian habitats and wetlands
- non-commercial car washing
- dechlorinated swimming pool discharges
- street wash water
- fire fighting discharges or flows

In addition, the following are not to be deemed as illicit discharges:

- Discharges specified in by the City as being necessary to protect public health and safety.
- Discharges from off-lot household sewage treatment systems permitted by the Hamilton

County General Health District for the purpose of discharging treated sewage effluent.

SECTION 4.0 IDDE Strategy

The City has developed a strategy to reduce the water quality impacts of IDDE that includes identification, investigation, quantification, prioritization, and mitigation.

SECTION 4.1 MS4 Mapping

The City has developed comprehensive storm system mapping as required by the permit. The City maintains a city-wide GIS that includes MS4 components and surface water features. In addition, the City has worked with Hamilton County in mapping of outfalls and has conducted dry Weather Screening (DWS) of these features.

These mapping and screening efforts have led to a comprehensive dataset of MS4 components and surface water features for the City.

SECTION 4.2 Dry Weather Screening

To identify illicit discharges, a process known as Dry Weather Screening (DWS) is utilized. This process requires field inspection of drainage features (components of the MS4) during periods of dry weather. Dry weather for this screening is defined as having a maximum of 0.1" of rain during the previous 72 hours. This 'dry weather' protocol helps to minimize flows due to rain or snow melt events and highlights illicit discharges.

The features screened during this process are:

- **Flowing Pipes**: outfalls with flow at the time of screening
  Note: outfalls with flow within catch basins are included in this group
- **Non-Flowing Pipes**: outfalls with no flow at the time of screening
  Note: outfalls without flow within catch basins are included in this group

If flowing pipes are found, the discharged flow is analyzed in accordance with criteria noted in Section 4.3. If necessary, samples are analyzed for pH, chlorine and fluoride levels. Further tests may also be conducted on a case-by-case basis as noted in Section 4.4. The source of any polluted flow found will be investigated using the GIS storm system maps upstream of the discharge.

SECTION 4.3 Identifying Potential Illicit Discharges

Features are categorized by their potential to be a source of illicit discharge and whether or not they are an obvious (severe) source of an illicit discharge. The criteria used to identify potentially illicit discharges are considered stand-alone indicators. These are odor, color, floatables, poor pool quality, benthic growth, and deposits and stains. The presence of at least one of these criteria can designate the outfall as potentially illicit.

It is important to identify obvious (severe) sources of illicit discharge during dry weather screening, because the presence of obvious indicators (e.g. raw sewage) allows that feature to be prioritized for future follow-up investigation and resolution. For a location to be determined as an obvious (severe) source of an illicit discharge, it must have at least one of several specific, pre-

defined stand-alone indicators.

SECTION 4.4 Effluent Sampling

To better understand what was being observed during dry weather screening and to verify the accuracy of the dry weather screening effort, follow-up effluent sampling of potential illicit discharges may be done as well. These water samples will be processed at an OEPA certified lab to determine the amounts of pollutants such as Ammonia, Ammonia Nitrogen, E.Coli, Fecal Coliform, and Methylene Blue Active Substances (MBAS).

The following is a brief description of the substances that can be sampled:

- **E. coli** - Escherichia coli, is a species of fecal coliform bacteria that is specific to fecal material from humans and other warm-blooded animals. Results reported in colony forming units per 100 milliliters (cfu/100 mL).
- **MBAS** - Methylene Blue Active Substances (surfactant): detergent indicator. Results reported in milligrams per liter (mg/L).
- **NH3** - Ammonia: pollutant and an indicator of sewage. Results reported in milligrams per liter (mg/L).

SECTION 4.5 Dry Weather Screening and Mapping Schedule

An initial DWS of MS4 outfalls and system outlets have been completed. Future dry weather screening will be concentrated in areas where HSTS still exist and at locations where illicit discharges were previously found.

SECTION 4.6 Mapping HSTS Connected to the MS4

The Hamilton County General Health District maintains records regarding HSTS in the City of Wyoming. In addition, the City of Wyoming maintains locations of HSTS upstream of the City in Springfield Township. All are mapped on the City's GIS system.

SECTION 4.7 Prioritized Areas

The City maintains mapping of the unsewered areas throughout its municipality. These areas were targeted during the dry weather screening efforts as they were more likely than the sewered areas to produce illicit discharges. The City continues their working relationship with the Hamilton County General Health District in working with residents in the unsewered areas.

SECTION 4.8 Mitigation

The City will continue to regularly monitor areas around HSTS to ensure that they are operating properly. In addition, the City has sent flyers to HSTS owners regarding operating and maintenance BMP's. The City will continue education and outreach efforts to these howmeowners to provide guidance and assistance as necessary.

Despite these efforts, which often only solve problems temporarily, the most thorough and permanent solutions to abate HSTSs causing public health nuisances are to connect households on HSTS to sewers that already exist and to extend public sewers into areas that are not currently served. The city will encourage the Metropolitan Sewer District and HSTS homeowners to extend

public sewers where practical.

Locations in and around HSTS will be inspected annually by city staff and investigate any complaints received.

SECTION 5.0 Communication and Outreach

Success of the IDDE Program depends, in part, on communicating it to the stakeholders and the public affected, and on providing the opportunity for community participation and input from various venues. The goal of this communication and outreach is for the community to understand the IDDE program, why it is required and its purpose, who is responsible for its implementation, how it will be implemented, and how they can become part of the solution to stormwater issues.

Public Education and Public Communication and Outreach efforts are detailed within the City's Stormwater Management Program in sections outlining activities for MCM 1 and MCM2. Examples of activities are not limited to, articles in newsletters, educational material in water consumer confidence report, Word on Wyoming, and email blasts as well as workshops and volunteer programs.

SECTION 5.1 Reporting Illicit Discharges

The IDDE Program benefits from citizen reports regarding spills, illegal dumping, sewage and other observed pollution and various avenues are available to the community depending on the material or liquid being discharged. The City receives discharge and spill complaints from residents, law enforcement, and fire officials which are subsequently investigated by City staff. The following are contact numbers for reporting illicit discharges:

- City of Wyoming, Ohio – 513-821-7600
  - Web reporting – http://wyomingohio.gov
- Ohio EPA spill response – 800-282-9378
- Hamilton County General Health District – 513-946-7800
- Hamilton County Soil and Water Conservation District – 513-772-7645

NPDES Small MS4 General Permit
Illicit Discharge Reporting Form

State of Ohio Environmental Protection Agency
Division of Surface Water

In accordance with Part III.B.3.j.v of OHQ000004, use this form to notify Ohio EPA if any of the following illicit discharges are detected discharging to your MS4:

- Illicit sanitary cross connections from industrial, commercial, or multi-family sources; and
- Leaking or broken sanitary sewer lines that are actively contributing sewage to your MS4.

Within 24 hours of discovery of the source of the illicit discharge, this form is to be completed and emailed to the appropriate Ohio EPA district office using one of the following addresses:

Southeast District Office: ***sedo24hournpdes@epa.ohio.gov***
Southwest District Office: ***swdo24hournpdes@epa.ohio.gov***
Northwest District Office: ***nwdo24hournpdes@epa.ohio.gov***
Northeast District Office: ***nedo24hournpdes@epa.ohio.gov***
Central District Office: ***cdo24hournpdes@epa.ohio.gov***

Permittee Information					
Name of MS4 Permittee:					
NPDES Facility Permit Number:					
Contact Name for Permittee:					
Contact Telephone Number:	( ) -				
Contact Email Address:					
Illicit Discharge Information					
Please provide: • A general description of the illicit discharge that was detected, • An estimate of volume (gpd), • The identified source (if known), • Any analytical data (if taken), • Potential for human contact (low, medium, high), and • Is there any evidence of any distressed or dead wildlife?					
Date/time illicit discharge began: ☐ Unknown		Date:	/ /	Time:	
Date/time illicit discharge discovered:		Date:	/ /	Time:	
Location of the illicit discharge (lat/long):					
Stormwater Outfall ID/Number (if known):					
Did discharge reach a water of the state?				☐ Yes	☐ No
If Yes, list affected waterbodies:					
Who else have you notified? (fire department, health department, water treatment plant, downstream MS4, facility responsible, etc.) include contact name(s) and phone number(s):					
Has illicit discharge been eliminated?				☐ Yes	☐ No
If Yes, date/time illicit discharge eliminated:		Date:	/ /	Time:	
If No, describe actions taken to contain the illicit discharge and estimated schedule for elimination:					

Appendix F

Earthwork Regulations

Local RULES AND REGULATIONS
OF THE
CITY OF WYOMING STORM WATER DISTRICT
WYOMING, OHIO

ARTICLE III

EARTHWORK REGULATIONS

TABLE OF CONTENTS

301 PURPOSE, SCOPE AND APPLICABILITY

A. The purpose of these Earthwork Regulations is to promote and maintain the health, safety, and welfare of the citizens of the City of Wyoming by establishing standards for storm water best management practices (BMPs) that minimize the degradation of the water resources of the City of Wyoming by

1. Reducing the discharge of pollutants from the municipal separate storm sewer systems (MS4s) owned or operated by the City of Wyoming to the maximum extent practicable,

2. Protecting water quality, and

3. Satisfying the appropriate water quality requirements of the Clean Water Act, Ohio Law, and the Ohio Revised Code (ORC), including Section 6111.

B. These Earthwork Regulations are adopted under authority of Ohio Law and the Ohio Revised Code, including Chapters 307 and 6117, and implement the requirements of the latest discharge permit issued by Ohio EPA to the City of Wyoming under the Phase II Program.

C. The City of Wyoming, Ohio shall designate the ***Enforcing Official*** for the enforcement of these Earthwork Regulations.

D. These Earthwork Regulations apply as follows:

1. The Geotechnical Requirements of these Earthwork Regulations apply to all construction projects within the City of Wyoming.

2. In the City of Wyoming, the Erosion Protection and Sediment Control (EP&SC) Requirements and Non-Sediment Pollution Control Requirements of these Earthwork Regulations apply to Earthwork disturbing one (1) acre of land or larger, or to Earthwork disturbing less than one (1) acre but part of a larger common plan of development that will disturb more than one (1) acre of land.

302 DEFINITIONS

The words and phrases defined in Article I – Definitions of the Rules and Regulations of the City of Wyoming shall have the same meaning herein unless otherwise provided.

303 COMPLIANCE WITH OTHER LAWS AND DISCLAIMER OF LIABILITY

A. Compliance with these Earthwork Regulations does not relieve the Owner from the duty to comply with any other applicable federal, state or local laws, regulations or ordinances or from responsibility otherwise imposed by law for damage to any person or property.

B. Neither the submission, approval, or disapproval of an Improvement Plan under these Earthwork Regulations; nor the Issuance or denial of a Permit; nor the compliance or lack of compliance with these Earthwork Regulations; nor any action or lack of action by the ***Enforcing Official*** shall relieve the Owner from responsibility for injury or damage to any person or property otherwise imposed by law, nor create or impose any liability upon the ***Enforcing Official***, the City of Wyoming, or their respective officers, agents, or employees for injury or damage to any person or property.

C. Storm water control practices authorized under these Earthwork Regulations and maintained according to a Construction-Phase Inspection and Maintenance Plan approved under these Earthwork Regulations shall not be considered to be a nuisance under these Earthwork Regulations. The ***Enforcing Officia***l will address conditions that may contribute to the creation of a nuisance according to pertinent local regulations when reviewing Improvement Plans and conducting facility inspections.

D. Failure of the ***Enforcing Official*** to observe or recognize hazardous or unsightly conditions or to recommend appropriate corrective measures shall not relieve the Owner from the responsibility for any resulting condition or damage or injury, or result in any liability on the part of the City of Wyoming, the ***Enforcing Official***, or their officers, employees, or agents for any resulting condition or damage or injury.

E. These Earthwork Regulations do not create a duty upon the ***Enforcing Official*** or the City of Wyoming to persons impacted by soil sediment pollution, erosion, or landslides.

304 CONFLICTS AND SEVERABILITY

A. In the event that any of these Earthwork Regulations may conflict with other applicable provisions of law or ordinance, the more restrictive applicable provisions, as determined by the ***Enforcing Official***, shall prevail where permitted by law.

B. Should any article, section, subsection, clause, or provision of these Earthwork Regulations be declared by a court of applicable jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the remainder of these Earthwork Regulations, in whole or in part.

305 EARTHWORKS PERMIT AND IMPROVEMENT PLANS REQUIRED

A. An Owner performing Earthwork subject to these Earthwork Regulations shall submit an Improvement Plan to the **Enforcing Official** addressing these Earthwork Regulations; then, receive City approval of the Improvement Plan prior to submittal of a Notice of Intent (NOI) to Ohio EPA. The owner shall submit the approved NOI to the **Enforcing Official** when applying for an Earthwork Permit and obtain an Earthwork Permit prior to commencing any Earthwork, unless exempted under these Earthwork Regulations.

B. A Building Permit approved by the City of Wyoming shall serve as authorization for Earthwork to proceed for projects that disturb less than one (1) acre and do not present geotechnical stability issues as set forth in these Earthwork Regulations, as determined by the ***Enforcing Official.***

306 EXEMPTIONS

A. The following Earthwork is exempt from these Earthwork Regulations:

1. A public highway, transportation or drainage improvement or maintenance project undertaken by a government agency or political subdivision in accordance with a statement of standard sediment control policies that is approved by the Chief of the Ohio Department of Natural Resources Division of Soil and Water Conservation.

2. Surface mining operations regulated by ORC, Section 1514.01.

3. Strip mining operations regulated under ORC, Section 1513.01.

4. Grading of land for purposes of farm activity as regulated under ORC.

5. Temporary excavations for underground utility lines, wells, tunnels, tanks, and vaults or sign foundations, provided all such excavations shall be promptly and properly backfilled and restored to the existing terrain and stabilized immediately.

6. Exploratory excavations under the direction of a Professional Engineer, provided all such excavations shall be promptly and properly backfilled and restored to the existing terrain and stabilized immediately.

7. Normal cemetery operations involving opening and closing graves as permitted in ORC, Sections 517 & 759

8. Operations involving refuse disposal, mining, quarrying, processing and stockpiling of soils or rock materials where controlled by other regulations, provided such operations do not cause instability of any adjacent property or the discharge of sediment.

B. Application and enforcement of the exemptions under Section 306 “Exemptions” of these Earthwork Regulations shall be conducted by the ***Enforcing Official***.

307 COORDINATION WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND PERMITS

A. Approvals issued in accordance with these Earthwork Regulations do not relieve the Owner of responsibility for obtaining all other necessary permits and/or approvals from federal, state, and/or local governments and compliance with other legal requirements. If requirements vary, the most restrictive shall prevail. Other permits and requirements may include, but are not limited to, those listed below.

1. The latest applicable Ohio EPA NPDES Permit authorizing storm water discharges associated with construction activity (CGP Permit);

2. Section 401 and 404 of the Clean Water Act;

3. Ohio EPA Section 401 Water Quality Certification General Isolated Wetland Permit;

4. Ohio Dam Safety Law Section 1501.21 OAC.

5. Applicable Flood Plain Regulations

6. Applicable ground water protection laws.

7. Hamilton County General Health District (HCGHD) Clean Hard Fill Regulations

B. Earthworks Permits and Building Permits shall be processed in the following manner:

1. No Building Permit shall be issued within the work area until the Owner has complied with all provisions of these Earthwork Regulations. All EP&SC BMPs

must be in compliance with the EP&SC BMP Performance Standards of these Earthwork Regulations and the approved plans, including but not limited to, proper installation and maintenance of sediment basins and traps, sediment fence and inlet protection, and that all idle areas have temporary and permanent stabilization as required under these Earthwork Regulations.

2. The City of Wyoming shall not issue Building Permits until the ***Enforcing Official*** provides notice of compliance with the Earthwork Permit. The ***Enforcing Official*** may request the appropriate building official to withhold the issuance of additional Building Permits, issue a Stop Work Order on active Building Permits, withhold inspections, or withhold the issuance of a Certificate of Occupancy on active Building Permits for non-compliance with these Earthwork Regulations, in addition to any other remedies that may be available to the ***Enforcing Official*** under these Earthwork Regulations and other law.

C. Earthwork Permits will not be issued by the ***Enforcing Official*** having jurisdiction absent a showing by the Owner that compliance with all applicable regulations and permit requirements has been demonstrated.

D. The issuance of an Earthwork Permit and activities conducted by the Owner pursuant to the Earthwork Permit process shall be coordinated with local utility providers to allow any necessary adjustment, relocation, addition or other modification to an existing utility, including overburden loading.

308 EARTHWORK SUBMITTAL PROCEDURES

A. An Owner wishing to undertake Earthwork covered by these Earthwork Regulations shall submit an Earthwork Permit Application and Improvement Plan to the ***Enforcing Official***. No Earthwork shall be undertaken until such Permit Application and Improvement Plan has been reviewed and approved through the established submittal and review process of the City of Wyoming.

B. Pre-Submittal Meeting: a Pre-Submittal Meeting with the ***Enforcing Official*** may be requested to discuss the proposed project, review requirements, identify unique aspects of the project that must be addressed during the review process, and establish a preliminary review and approval schedule.

C. Concept Plan: The Owner of a project requiring a preliminary Record Plat or equivalent submittal shall submit Improvement Plans that include the proposed Earthwork in concept (Concept Plan), and the applicable fees to the ***Enforcing Official***. Concept Plans shall show approximate preliminary locations of the proposed parcel boundaries, conservation areas, setbacks, stream protection corridor delineations (if applicable), flood plains, dedicated open space, public roads, water resources, construction access points, existing topography, on-site and off-site areas vulnerable to erosion and sediment damage, drainage facilities, Post-Construction BMPs, and easements to allow the ***Enforcing Official*** to determine if the site is laid out in a manner that meets the intent of these Earthwork Regulations and if the proposed EP&SC BMPs and Post-Construction BMPs are capable of controlling runoff from the site in compliance with these Earthwork Regulations and the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming). The ***Enforcing Official*** shall review the Concept Plans and provide comments and recommendations for revisions if any.

A Concept Plan is required:

1. For all subdivisions

2. For all non-residential development and Clean Hard Fill Sites that will involve disturbing one (1) acre of land or more

For other construction projects, Concept Plans are encouraged to be submitted for review by the ***Enforcing Official*** in advance of submitting an application for an Earthwork Permit in order to avoid subsequent delays caused by the submittal of Improvement Plans which do not comply with these Earthwork Regulations.

D. Improvement Plans: The Improvement Plan submission shall consist of construction drawings and specifications together with the applicable permit forms and such fees as may be required. The Improvement Plans shall meet the requirements of these Earthwork Regulations and must be approved by the ***Enforcing Official*** prior to approval of the Earthwork Permit and/or before issuance of a building permit by the Building Department. Any revised Improvement Plans shall be submitted to the ***Enforcing Official*** for approval prior to implementing the proposed modification.

E. Consent to Enter Private Property: Submittal of an Earthwork Permit application, Concept Plan, and/or Improvement Plans shall be deemed to provide consent to the ***Enforcing Official*** to enter property subject to these Earthwork Regulations for the purpose of gathering information necessary for review of and comment to such Permit application, Concept Plan and/or Improvement Plans.

F. Review and Comment: The ***Enforcing Official*** shall review and comment on any Concept and/or Improvement Plans submitted within a reasonable period of time after proper submission. The final Improvement Plans submitted may be either approved or disapproved. If the Improvement Plans are disapproved, they shall be returned with comments stating the reasons for disapproval and requirements for revisions, if any.

G. Approval Required: Earthwork shall not begin and building permits shall not be issued without approved Improvement Plans for Earthwork covered by these Earthwork Regulations as well as approval from the Ohio EPA through the NOI.

H. Individual Lot Construction Will Not Proceed: Improvement Plans for individual lots in a subdivision will not be approved and building permits will not be issued unless the larger common plan of development or sale containing the lot is in compliance with these Earthwork Regulations.

I. Approval Valid for Two (2) Years / Modification of Plans: If Earthwork has not commenced within two (2) years of approval, Improvement Plans must be re-submitted for review and approval in accordance with rules in effect at the time of re-submittal. Modifications to the project require submittal and approval of a revised Improvement Plan before work may proceed.

J. Stopped or Abandoned Earthwork: Earthwork that is in compliance with these Regulations and is stopped or abandoned for a period of two (2) consecutive years from the date of discontinuation of Earthwork shall cause the approval of the Improvement Plans to expire and become invalid. For site work to continue either the previously

approved plans must be submitted if the scope of the Earthwork has not changed***, or*** an updated set of plans must be submitted for approval by the ***Enforcing Official.***

K. Preconstruction Meeting Required. On all Earthwork activities one (1) acre or larger and all clean hard fill sites, an EP&SC pre-construction meeting shall be held with the ***Enforcing Official***, the Owner, and the contractors before any Earthwork begins.

L. Earthwork Permit Issuance Procedure. An Earthwork Permit or Approval will not be issued until all Improvement Plans for the project are approved by the ***Enforcing Official*** and all pertinent Local, State and Federal permits for the project are obtained, including the following:

1. An approved NOI from the Ohio EPA

2. An Earthwork Permit or Approval will not be issued until approval has been obtained under local planning, zoning, subdivision, storm drainage, special flood hazard approval and/or building requirements.

3. All Earthwork greater than one acre shall comply with all planning, zoning, and/or development requirements of the City of Wyoming before an Earthwork Permit or approval will be granted. A copy of these approvals shall be provided to the ***Enforcing Official***.

4. In Wyoming, only clean hard fill shall be accepted as defined in these Earthwork Regulations.

5. Earthwork Permits for building applications and residential subdivision and commercial developments are valid for the duration of the project unless Earthwork is stopped or abandoned as defined under Paragraph 308(J) of these Earthwork Regulations.

6. Earthwork Permits for Clean Hard Fill Project Sites are valid for one (1) year. A renewal shall be obtained prior to expiration of the Earthwork Permit.

M. If ownership of any portion of an approved project changes, the new Owner shall submit to the ***Enforcing Official*** in writing the new Owner's name, address, telephone number; and the name, address and telephone number of the new Owner's Professional Engineer if different from the original Professional Engineer. The new Owner shall contact the ***Enforcing Official*** to schedule an onsite meeting prior to continuing with the project.

N. The Owner shall notify the ***Enforcing Official***:

1. Of commencement of Earthwork covered by these Earthwork Regulations or the Earthwork Permit at least 48 hours in advance

2. Of locations of any borrow or disposal sites that will be utilized prior to commencement of Earthwork,

3. When Earthwork is completed or temporarily or permanently suspended;

4. Of any communication with and/or regulatory action by the Ohio EPA;

5. Of any proposed deviations from the originally approved plans.

O. Clean Hard Fill Sites. An Earthwork accepting fill that is not covered under Improvement Plans or a Building Permit is a Clean Hard Fill Site. An Earthwork Permit for a Clean Hard Fill Site shall be valid for one (1) year from the date of approval. If Earthwork at the Clean Hard Fill Site is expected to continue beyond the expiration date, a renewal permit shall be obtained prior to expiration. A renewal permit requires a status report from the Owner, and a signed statement from the Owner that the project will precede in accordance with the previously approved plans and Earthwork Permit. A yearly renewal is mandatory for all Clean Hard Fill Sites. A modification of the Earthwork Permit for a Clean Hard Fill Site requires the submittal and approval of a revised grading plan defining recommended EP&SC BMPs before the work as modified may proceed. The project shall be in compliance with all provisions of these Earthwork Regulations before a renewal will be granted.

309 EARTHWORK REQUIREMENTS FOR IMPROVEMENT PLANS

A. Earthwork Requirements: The Improvement Plans submitted with the application for Earthwork Permit shall describe in detail how the EP&SC Requirements, Geotechnical Requirements, and Non-Sediment Pollution Control Requirements of these Earthwork Regulations shall be fulfilled. The Improvement Plans shall also describe in detail how the quantity and quality of storm water will be managed after construction is complete for discharge from the site and/or into a water resource. The Improvement Plans will illustrate the type, location, and dimensions of structural and non-structural EP&SC BMPs, Post-Construction BMPs, and Non-Sediment Pollution BMPs incorporated into the site design to address the requirements of these Earthwork Regulations, and provide the rationale for their selection. The rationale must identify how EP&SC BMPs and Post-Construction BMPs will address flooding within the site as well as flooding that may be caused by the development upstream and downstream of the site, as required under the storm water quantity control regulations of the City of Wyoming. The rationale must demonstrate that these EP&SC BMPs, Non-Sediment Pollution BMPs, and Post-Construction BMPs minimize degradation to the water resource and its floodplain.

B. Preparation by Professional Engineer: The Improvement Plans shall be prepared and sealed by a Professional Engineer and include supporting calculations, plan sheets, and design details. To the extent necessary, as determined by the ***Enforcing Official,*** a site survey shall be performed by a Professional Surveyor to establish boundary lines, measurements, or land surfaces. The ***Enforcing Official*** may accept submittals for non-structural, clean hard fill sites from the Owner in instances where the ***Enforcing Official*** determines that the intent and purpose of these Earthwork Regulations can be met and the interests of the public reasonably protected. These submittals shall be handled on a case by case basis. Acceptance and approval shall be at the discretion of the ***Enforcing Official***.

C. EP&SC Manual: The most recent edition of the Ohio Department of Natural Resources Rainwater & Land Development Manual shall be the basis for standards and specifications for erosion prevention and sediment control.

D. Contents of Improvement Plans: The Improvement Plans shall include the following:

1. Site Location Map: USGS 1:24,000 or equivalent map showing the Project Name, the boundary of the project site, the name and location of major existing

roadways, and the name and location of the immediate receiving water resource(s) within 500 feet of the boundary of the project site and the first subsequent named water resource(s).

2. Site Description and Information: The following information shall be included in the general notes, project specifications and/or an attached narrative report:

   a. The Project Name and the location of the project, including the complete site address or Parcel Identification Number, and individual lot addresses if known and applicable.

   b. Contact information: Provide the Company name and contact information and the contact names, addresses, phone numbers, facsimile numbers, and e-mail address for the following:

      i. The Professional Engineer responsible for the preparation of the Improvement Plans.

      ii. The site Owner, and if applicable the agent or designee.

      iii. The Earthwork Contractor and all applicable subcontractors, when identified.

   c. A description of the nature and type of the construction activity (e.g. residential, shopping mall, clean hard fill site, etc.).

   d. Total area of the site and the area of the site that is expected to be disturbed (i.e. grubbing, clearing, excavation, filling or grading, including off-site borrow areas, excavated material disposal areas, and off-site project construction support activities).

   e. A calculation of the area-weighted runoff coefficients for each catchment tributary to an EP&SC BMP, Post-Construction BMP, storm water conveyance facility, and storm water detention facility under both pre-construction, construction, and post-construction site conditions.

   f. An estimate of the impervious area and percent imperviousness of the site and areas draining to the site at the beginning and at the conclusion of the project. Also, include a measure of on-site and off-site catchment area, an estimate of the impervious area that may be constructed by subsequent owners and the overall imperviousness of the catchment.

   g. Existing data describing the soils throughout the site, including the soil series, soil association, and hydrologic soil group. Additional geotechnical data to support the design of each proposed EP&SC BMPs and Post-Construction BMP (e.g., infiltration, extended conveyance, media filtration, or other BMP) whose effectiveness depends upon site-specific data about the porosity, infiltration characteristics, depth to groundwater, depth to bedrock, and any impermeable layers.

   h. Existing data, if available, describing the quality of any discharge from the site as well as a description or other documentation of the condition of

any on-site streams.

i. A description of prior land uses at the site.

j. 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.

k. The name and/or location of the immediate receiving water resource(s) and the first subsequent named water resource(s) and the aerial extent and description of wetlands or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project.

l. Location and description of any storm water discharges associated with asphalt and concrete plants on or contiguous with the project site and dedicated to the project, and the best management practices to address pollutants in these storm water discharges.

3. Project Site Map(s): One or more site maps of the Project shall be created. The map or series of maps shall be drawn at a scale of at least 1-inch equals 50-feet. The site is to be referenced using the State Plane coordinates and shall indicate the datum used. It is preferred that the entire site be shown on a single 24”x36” (architectural D-size drawing) plan sheet to allow a complete view of the site during plan review. Each map shall identify the phase of the project, if applicable, in relation to the overall development plan and include a north arrow, elevation datum and date of preparation. The map or series of maps shall extend 200 feet beyond the project boundary and shall indicate for that area, at a minimum the following:

a. Limits of Earthwork on the site for each phase of the project.

b. Soils types for the entire site, including the location and extent of visibly evident existing excavations or fills, slope instability, erosion and water seepage or wet conditions, unstable or highly erodible soils, or other areas with potentially serious existing or future erosion problems.

c. Existing and proposed two-foot (2') contours, unless site conditions require more detailed topography to depict site drainage conditions.

d. Drainage patterns, EP&SC BMPs, and Post-Construction BMPs within, entering, and exiting the site during each phase of the project, including any existing and/or constructed combined and separate storm water drainage conveyance and drainage inlet facilities within the site, beyond the site, and/or within the larger common plan of development if utilized by the project. These maps shall include a delineation of drainage watersheds at the site expected before, during, and after major grading activities as well as the total off-site and on-site size of each drainage watershed in acres, and the pre-construction and post-construction runoff coefficient for each area.

e. A delineation of drainage catchments tributary to each storm water management control present during each phase of construction, including before, during, and after major grading activities as well as the total off-site and on-site size of each drainage watershed in acres and the pre-construction and post-construction runoff coefficient for each area.

f. Location of existing and proposed utilities including appurtenances, structures and outfalls. The approximate depths of all utilities shall be indicated.

g. Water resource locations including known springs, wetlands, streams, lakes, water wells, and associated Stream Corridor Protection Zone as defined under the Stream Corridor Regulations (Article IV of the Rules and Regulations of the City of Wyoming) and/or other setbacks on or within 200 feet of the site, including the boundaries of wetlands or streams and any first subsequent named receiving water resource(s) intending to be filled or relocated under an approval from the Army Corps of Engineers and/or Ohio EPA.

h. Existing and proposed locations of buildings, roads, and parking facilities.

i. The location of any in-stream activities including stream crossings.

j. Existing and proposed property boundaries and individual lot numbers.

k. The location of any existing or proposed easements or other restrictions placed on the use of the property and the responsible party(ies) under such easement or restriction.

l. On-site and off-site areas vulnerable to erosion and sediment damage.

m. Areas designated for the storage or disposal of solid, sanitary, and toxic wastes, including dumpster areas, areas designated for cement truck washout, generator location and vehicle fueling.

n. The location of designated construction entrances where the vehicles will access the construction site.

4. Information Regarding EP&SC BMPs: A complete description of the measures proposed to satisfy the performance standards of these Earthwork Regulations shall be provided in the Improvement Plan for each phase of the Project in a professionally prepared document which, at a minimum, includes the following appropriate Earthwork principles, techniques, methods, operations and work sequences :

a. One or more site maps for each phase of construction showing the location and extent of each EP&SC BMP that will be installed.

b. A drawing of each structural EP&SC BMPs providing sufficient dimensions, construction details, and design calculations.

c. Standards and specifications for the installation and maintenance of all

EP&SC BMPs.

d. Temporary and permanent stabilization requirements and timelines for specific areas of the site. Standards and specifications shall be provided for all vegetative practices including seeding, mulching, and fertilizing rates. Standards and specifications shall be included for any turf reinforcement matting or other stabilization practices as required under these Earthwork Regulations or by the ***Enforcing Official***.

e. Areas of the site that do not drain to primary EP&SC BMPs such as sediment basins and traps shall be indicated. Notes shall be included on the plans indicating the appropriate EP&SC BMPs, standards and specifications for all EP&SC BMPs, including those EP&SC BMPs that will be provided for use by successor owners of individual lots, and those that shall be implemented by successor owners within their individual lots.

f. An indication of areas where soil stockpiles are to be located and a narrative procedure for the stabilization of these areas immediately after the soil stockpile is completed. If the specific locations cannot be addressed in the design stage, direction shall be provided regarding the location of the soil stockpiles by indicating areas of concern and outlining the stabilization requirements.

g. Estimated schedule indicating the anticipated sequence of Earthwork and other construction activities, along with the EP&SC BMPs and non-sediment pollution control BMPs to be employed during each sequence, including the time of exposure of each area prior to the completion of approved EP&SC BMPs.

h. A written narrative that describes the overall EP&SC plan and highlights specific areas of concern. The narrative shall indicate stabilization requirements, inspection and maintenance guidelines, and direct the developer to contact the ***Enforcing Official*** for a pre-construction meeting prior to commencing with any Earthwork.

i. For subdivided developments where a centralized EP&SC BMP capable of controlling multiple individual lots is not provided, a detail drawing of a typical individual lot showing standard individual lot EP&SC BMPs.

5. Information Regarding Post-Construction BMPs: For each non-structural and structural Post-Construction BMP to be employed on the site, the Improvement Plan shall include the following:

a. Location and size, including maps showing the location of Post-Construction BMPs and other storm water facilities, detailed drawings with dimensions and elevations, and design calculations. Details of Post-Construction BMPs shall be drawn to scale and shall show volumes and sizes of contributing drainage areas.

b. Soil and subsurface conditions, including tests of infiltration rates for native and amended soils underlying Post-Construction BMP, and borings or equivalent data indicating seasonal high groundwater levels, top of

bedrock elevations, and perched groundwater elevations.

c. Specifications for materials used to construct each Post-Construction BMP, including vegetation, amended soil composition, and structural materials.

d. Post-Construction BMP operations and maintenance requirements during and after construction.

e. Any supplemental information requested by the ***Enforcing Official***.

6. Other Approvals and Permits included in Improvement Plan:

a. Ohio EPA NPDES Permit Number and other applicable state and federal permit numbers or approvals shall be provided if available, or the status of permit applications shall be provided if final approvals have not been received.

b. The parcel number, address, contact information, and Earthwork Approval shall be provided for any off-site borrow areas and excavated material disposal areas.

7. Construction-Phase Inspection and Maintenance Plan: The Improvement Plans shall include a Construction-Phase Inspection and Maintenance Plan for the EP&SC BMPs and Non-Sediment Pollution BMPs employed on the property. This Plan shall address the inspection and maintenance frequency and requirements listed in Section 314 INSPECTION AND MAINTENANCE OF EROSION PREVENTION AND SEDIMENT CONTROL (EP&SC) Bmps and Section 316 INSPECTION AND MAINTENANCE OF NON-SEDIMENT POLLUTION BMPs of these Earthwork Regulations.

8. Calculations: Calculations shall be provided as part of the Improvement Plans for proposed storm water runoff flows, volumes, and timing into and through all Earthwork and Post-Construction BMPs. Calculations shall include the underlying assumptions and hydrologic and hydraulic methods and parameters, under pre- and post-construction land use conditions, for flood control, water resource protection, and water quality, as required in Section 310 EROSION PREVENTION AND SEDIMENT CONTROL (EP&SC) BMP PERFORMANCE STANDARDS, Section 311 Geotechnical Performance Standards, and Section 312 Non-Sediment Pollution Bmp Performance Standards of these Earthwork Regulations. Calculations shall demonstrate compliance with local storm water quantity management requirements and demonstrate that the runoff from upper watershed areas have been considered in the calculations and indicate that no adverse impacts are conveyed downstream of the proposed project An investigation of immediate downstream conditions as defined by the ***Enforcing Official*** is required to support development of a rationale for EP&SC BMP and Post-Construction BMP selection addressing anticipated impacts on the water resource and floodplain morphology, hydrology, and water quality. If the downstream property owner(s) refuse to allow access a letter must be submitted by the downstream property owner(s) stating the refusal.

9. The Improvement Plans may be required to contain additional information when

requested by the ***Enforcing Official***, including but not limited to:

a. A report from a Professional Engineer qualified in geotechnical engineering showing the 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;

b. Drainage systems are required to be of such design as to adequately accommodate the surface runoff. Calculations shall be submitted where requested together with a map showing the drainage areas of all land tributary to the site, and estimated runoff (cubic feet per second) of the area draining into any water resource computed according to current acceptable standards as required under the storm sewer system design regulations of the City of Wyoming;

c. A description of the borrow material, its source, the construction methods to be used and the specified minimum degree of compaction;

d. The preparation of existing ground surface to receive fill; and

e. Subsurface drainage where necessary for stability.

E. Substantial change in site conditions: The ***Enforcing Official*** shall be notified whenever unforeseen site conditions emerge (e.g., unforeseen water resources such as unknown springs) during the course of construction that affects the Earthwork.

F. A notation shall be placed on the plans that the Owner is responsible for notifying the Ohio Utilities Protection Service (OUPS) of the location of the excavation or fill site, per Section 3781.25 to 3781.32 of the ORC.

G. Continuation of Controls for Individual Lot Development: Improvement Plans for single family homes and/or individual structures that will disturb less than one (1) acre but are part of a larger common plan of development shall describe planned EP&SC BMPs for the individual lot, including the location of any EP&SC BMPs, and the appropriate standards and specifications for their installation, maintenance, and final stabilization, as well as a timeline for completion. Where seasonal conditions prevent permanent stabilization, alternative temporary stabilization practices shall be specified in the Improvement Plans. Detailed specifications for EP&SC BMPs shall be included for lots that do not drain to a sediment basin or trap, or for areas needing special attention, such as steep slopes and areas within 50’ of water resources. The Owner of the individual lot shall inform the future owner of the lot of any EP&SC Requirements that will carry over to the new lot (home) owner, and notify the ***Enforcing Official*** within seven (7) days of the date of transfer of the lot(s).

H. Improvement Plan Updates Required. The approved Improvement Plan shall be modified whenever there is a change in design, construction, operation or maintenance which has or is likely to have a significant effect on the potential for the discharge of pollutants, or if the recommended BMPs prove to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity. Revised Improvement Plans shall be provided to the ***Enforcing Official*** for review and approval prior to implementing any proposed changes.

310 EROSION PREVENTION AND SEDIMENT CONTROL (EP&SC) BMP PERFORMANCE STANDARDS

A. The Improvement Plan shall be a professionally prepared document which includes appropriate Earthwork principles, techniques, methods, operations and work sequences. The Earthwork BMP Performance Standards contained in this Section shall be followed unless a variance is approved by the ***Enforcing Official*** consistent with these Earthwork Regulations according to criteria in paragraph 310(O). EP&SC BMPs must be maintained in good operational condition until permanent Post-Construction BMPs compliant with the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming) are installed and operational and all areas disturbed during construction have been stabilized.

B. Duty to Inform Contractors and Subcontractors: The Owner shall inform all contractors and subcontractors who will be involved in the implementation of the Earthwork BMPs about the terms and conditions of the Earthwork Permit. The Owner shall maintain a written document containing the signatures of all contractors and subcontractors involved in the implementation of the Earthwork BMPs, acknowledging that they have reviewed, understand and will follow the conditions and responsibilities of the Earthwork Permit and the Improvement Plans. Improvement Plans shall be created and signatures shall be obtained prior to commencement of any Earthwork. A copy shall be provided to the ***Enforcing Official*** prior to commencing with the project.

C. Post-Construction BMPs and EP&SC BMPs: Improvement Plans shall show temporary and permanent methods, features and facilities to control runoff as required under these Earthwork Regulations and under the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming).

D. Non-Structural Preservation Methods: The Improvement Plans must clearly delineate on the document and indicate methods of preventing disturbance of any water resources, riparian areas, unstable or highly erodible soils, steep slopes, or other areas that are protected under local, State, or Federal law. Improvement Plans shall also identify any riparian setbacks, green space preservation, conservation buffers, and other stream protection measures required under the Stream Corridor Regulations (Article IV of the Rules and Regulations of the City of Wyoming). The Project shall also incorporate practices that preserve the natural condition in all other areas that are not integral to the proposed development activity. Such practices may include: preserving riparian areas adjacent to surface water resources, preserving existing vegetation and vegetative buffer strips, phasing of construction operations in order to minimize the amount of disturbed land at any one time and designation of tree preservation areas or other protective clearing or grubbing practices.

E. Phased Installation: The installation of the EP&SC BMPs shall be done progressively as the project is constructed. Sediment basins, storm water basins, and/or sediment traps shall be constructed and the slow release riser pipes (Skimmer) and emergency overflow shall be functioning before clearing activity begins in the contributing watershed draining to said BMPs. All other measures to trap sediment shall be constructed and completed before upslope clearing and grading activities are permitted to take place. Earthen structures such as dams, dikes and diversions shall be stabilized within seven (7) days after installation is complete. Where slow growing or dormant seasons occur,

alternate or temporary solutions as required under these Earthwork Regulations shall be utilized. The EP&SC BMP sequencing, installation, and seasonal alternatives shall be a part of the Site Description portion of the Improvement Plans. As construction progresses and the topography is altered, appropriate EP&SC BMPs must be constructed or existing controls altered to address the changing drainage patterns until final permanent stabilization of the site.

F. Sediment Control BMPs: The Improvement Plans shall include a description of Sediment Control BMPs that store runoff, allow sediments to settle and/or divert flow away from exposed soils or otherwise limits runoff from exposed areas. Structural EP&SC BMPs shall be used to control erosion and trap sediment from a site remaining disturbed for more than 14 days. Such practices shall include: sediment basins and traps, stabilized construction entrance, dust control, sediment fences, earth diversion dikes or ditches which direct runoff to a sediment settling pond and storm drain inlet protection, all of which are further specified below:

1. Sediment Basins and Traps: Concentrated storm water runoff and runoff from drainage areas that exceed the design capacity of sediment fence or inlet protection shall pass through a sediment basin or trap designed according to the following criteria:

   a. For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin or trap shall be provided until final permanent stabilization of the site. Sediment settling ponds are required for all inlets receiving drainage of one or more acres. Alternative controls may be approved if it can be demonstrated that the alternative controls are equivalent in effectiveness to a sediment basin or trap. For drainage locations serving less than ten (10) acres, smaller sediment basins and/or traps should be used.

   b. The sediment basins/traps's dewatering zone shall be sized to provide at least 67 cubic yards of storage per acre of total contributing drainage area. with a minimum 48 hour draw down time. When determining the total contributing drainage area, off-site areas and areas which remain undisturbed by construction activity must be included unless runoff from these areas is diverted away from the sediment basin or trap and is not co-mingled with sediment-laden runoff. These calculations shall be provided in the Improvement Plans. The volume of the sediment storage zone shall be1,000 Cubic Feet per disturbed acre within the watershed or estimated/calculated by a generally accepted erosion prediction model. The depth of the sediment basin must be less than or equal to five (5) feet. The configuration between the inlet and the outlet of the basin shall provide at least two (2) units of length for each unit of width (>2:1 length: width ration). Sediment shall be removed from the sediment storage zone once it exceeds 50 percent of the minimum required sediment storage design capacity and prior to the conversion to the post-construction practice unless suitable storage is demonstrated based upon over-design. The elevation corresponding to 50 percent of the minimum required sediment storage design capacity shall be provided on the plans. These elevations shall be staked around the perimeter of the basin(s) or trap(s) on-site (a minimum of 6 stakes shall be used). When the sediment reaches this elevation, the sediment shall be removed. This requirement

shall be provided in Improvement Plans when detailing maintenance standards and specifications and shall be consistent with Section **314** INSPECTION AND MAINTENANCE OF EROSION PREVENTION AND SEDIMENT CONTROL (EP&SC) Bmps.

c. When designing sediment basins/traps, public safety shall be considered as a design factor, especially as it relates to children, and alternative sediment control BMPs must be used where site limitations preclude a safe design. The use of a combination of EP&SC BMPs in order to achieve maximum pollutant removal is required. No temporary sediment basins or traps shall be placed within a permanent storm water quantity or quality control basin or Post-Construction BMP unless it is large enough to contain the entire sediment settling volume, water quality volume, and storm water quantity control volume, subject to the approval of the ***Enforcing Official*** and the City of Wyoming. In addition, no temporary sediment basins or traps shall be placed directly adjacent to a water resource unless prior written approval has been provided by the ***Enforcing Official.***

d. Specific information shall be provided for the sediment basins/traps, including the size and type of slow release outlet and/or skimmer or equivalent dewatering device. Calculations shall demonstrate that the slow release outlet has been designed to achieve the 48-hour drawdown time. Specifications shall be provided for the geo-textile fabric and riprap for the emergency overflows for each sediment basin/trap. The riser shall be wrapped first with a welded wire fencing and then with filter fabric. For approved retrofits of storm water quantity basins, the upper orifice shall be temporarily protected to minimize sediment from entering the Post-Construction BMP.

2. Off-Site Traffic: Off-site vehicle tracking of sediments and dust generation shall be minimized. All roads, storm drainage systems and sidewalks shall be kept free of sediment so as not to create a hazard. All access points shall have a stabilized construction entrance. Periodic street sweeping and topdressing of the construction entrance shall be performed to ensure compliance with these Earthwork Regulations. Washing sediment into storm drainage systems is not an acceptable practice unless the system drains to a sediment basin or trap. Washing of sediment directly into water resources or storm drainage systems that drain directly to water resources without passing through a properly sized and located EP&SC BMPs is prohibited.

3. Dust Control: Dust from Earthwork shall be controlled using effective dust control practices for site and climatic conditions during each phase of construction.

4. Sediment Fence: Sheet flow runoff from Earthwork shall be intercepted by sediment fences or diversions as necessary to meet EP&SC objectives of these Earthwork Regulations. Where intended to provide sediment control, sediment fence shall be placed on a level contour. These Earthwork Regulations do not preclude the use of other sediment barriers designed to control sheet flow runoff. The relationship between the maximum drainage area to sediment fence for a particular slope range is shown in ***Table 310-A.*** Sediment fences shall not be used for sediment control associated with concentrated flows.

Table 310-A Sediment Fence Drainage Area Limits

Maximum Drainage Area to 100 Linear Feet of Sediment Fence	Range of Slope for a Particular Drainage Area
0.5 acres	< 2%
0.25 acres	≥ 2% but < 20%
0.125 acres	≥ 20% but < 50%

5. Diversions. Storm water diversion practices shall be used to keep runoff away from Earthwork, control storm water run-on quantities and protect steep slopes where practicable. Such devices, which include ditches, dikes or berms, may receive storm water runoff from areas up to ten (10) acres. Earth diversion dikes or ditches alone are not considered a sediment control BMP unless those are used to direct storm water to a properly-designed sediment-basin or trap.

6. Inlet Protection: EP&SC BMPs shall also be used to minimize sediment-laden water from entering active storm drain systems, even if the storm drain system drains to sediment basins/traps. Inlet protection or other EP&SC BMPs are required to improve the overall effectiveness of the sediment basins/traps and minimize their maintenance. Hazards resulting from storm drain inlet protection as it relates to diverting storm water runoff and causing erosion or creating flooding problems to adjacent roads or structures shall be taken into consideration, and inlet protection shall only be implemented where ponding can occur without creating hazardous situations; alternative practices shall be specified if ponding cannot occur around the inlet and the inlet does not drain to a sediment basin or trap.

G. Dewatering Activities: Dewatering activities involve the disposal of waters accumulating in trenches, sediment basins, sediment traps, or other locations where ground or surface waters may collect on the site. There shall be no turbid discharges to surface water resources resulting from dewatering activities. If trench, ground water, or any other dewatering activities containing sediment shall pass through a sediment settling pond or other equally effective sediment control BMP prior to being discharged from the site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag or comparable practice. Dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. Care shall be taken when discharging groundwater or during any dewatering work to ensure that runoff does not become pollutant-laden by traversing over disturbed soils or other pollutant source and/or cause erosion in stabilized areas. The Professional Engineer shall provide specifications for de-watering activities for the project. The Professional Engineer shall provide specifications for cleaning and disposal of spoils for in-line retention systems to prevent the discharge of sediment or other pollutants, if applicable.

H. Stream Protection: If Earthwork disturbs areas adjacent to streams, EP&SC BMPs shall be designed and implemented on-site to protect all adjacent streams from the impacts of sediment laden runoff. No EP&SC BMPs (e.g., the installation of silt fence or a sediment basin or trap in a stream) shall be used in a stream. Earthwork shall be performed in compliance with all applicable stream corridor protection zone or setback requirements. Specific stream corridor protection zone requirements are found in the Stream Corridor Regulations (Article IV of the Rules and Regulations of the City of Wyoming).) The

placement of fill within FEMA regulated flood plains shall not be permitted to cause downstream erosion or other negative impacts.

I. Groundwater Protection:

1. No Earthwork Project shall be permitted to cause the pollution or degradation of groundwater. The Professional Engineer shall design the project to control the discharge of pollution into groundwater resources.

2. Unless otherwise authorized by Ohio EPA, only uncontaminated soil may be used as a fill material for any Earthwork in Wyoming

3. Clean Hard Fill Sites must monitor the fill material to ensure compliance with these Earthwork Regulations.

4. All Earthwork Projects in Wyoming must ensure proper storage and disposal of chemicals and fuels. All spills shall be cleaned up immediately and reported as required under State, Federal and local laws and regulations, including the State Emergency Response Commission (SERC) set of eight (8) release reporting rules (3750-25-01, 3750-25-05; 3750-25-10; 3750-25-12, 3750-25-13; 3750-25-15; 3750-25-20; 3750-25-25) effective June 30, 1993. For more information contact Ohio EPA.

J. Erosion Prevention Practices: The Project shall make use of erosion prevention practices that are capable of providing cover over disturbed soils unless a waiver is approved in accordance with Section 310(O) of these Earthwork Regulations. A description of erosion prevention practices designed to re-stabilize the site after Earthwork is complete shall be included in the Improvement Plans. The Improvement Plans must provide specifications for stabilization of all disturbed areas of the site and provide guidance as to which method of stabilization will be employed for the various times of the year. Such practices may include: seeding, mulching, matting, sod stabilization, vegetative buffer strips, phasing of construction operations, and use of construction entrances and the use of alternative ground cover. Erosion prevention practices shall also comply with Section 510 (C) (4) of the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming).

Table 310-B: Permanent Stabilization

Areas Requiring Permanent Stabilization	Time Frame to Apply Erosion Prevention Practices
Any areas that will lie dormant for one (1) year or more	Within seven (7) days of the most recent disturbance
Any areas within 50 feet of a stream and at final grade	Within two (2) days of reaching final grade
Any other areas at final grade	Within seven (7) days of reaching final grade within that area

Table 310-C: Temporary Stabilization

Areas Requiring Temporary Stabilization	Time Frame To Apply Erosion Prevention Practices
Any disturbed areas within fifty (50) feet of a stream and not at final grade	Within two (2) days of the most recent disturbance if the areas will remain idle for more than fourteen (14) days
For all construction activities, any disturbed areas that will be dormant for more than fourteen (14) days but less than one (1) year, and not within fifty (50) feet of a stream	Within seven (7) days of the most recent disturbance within the area For residential subdivisions, disturbed areas must be stabilized at least seven (7) days prior to transfer of permit coverage for the individual lot(s)
Disturbed areas that will be idle over winter	Prior to the onset of winter weather – follow the guidelines outlined in the Rainwater & Land Development Manual for dormant seeding specifications

K. Stabilization: At a minimum, disturbed areas must be stabilized as specified in ***Tables 310-B*** and ***310-C***. Where vegetative stabilization techniques may cause structural instability or are otherwise unobtainable, alternative stabilization techniques shall be employed. Approval shall be obtained from the ***Enforcing Official*** before implementing alternative stabilization techniques per Section 310(N) of these Earthwork Regulations.

1. Permanent Stabilization of Ditches: Special measures shall be undertaken to stabilize ditches and prevent erosive flows. Measures may include seeding, dormant seeding (as defined in the latest edition of the Rainwater and Land Development Manual), mulching, erosion control matting, sodding, riprap, natural design with bioengineering techniques or rock check dams. The standards and specification shall be included in the permanent stabilization requirements.

2. Runoff Control Practices: The Project shall incorporate measures which control the flow of runoff from disturbed areas so as to prevent erosion from occurring. Such practices may include rock check dams, pipe slope drains, diversions to direct flow away from exposed soils and protective grading practices. These practices shall divert runoff away from disturbed areas and steep slopes where practicable. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide non-erosive flow velocity from the structure to a water course.

L. Control of Sediment-Laden Runoff from Post-Construction BMPs: No storm water shall be directed through any Post-Construction BMP required under the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming), or portions thereof, until the entire area tributary to the Post-Construction BMP has reached final stabilization. Final stabilization occurs after the completion of the final grade at the site, after all of the utilities are installed, and the site is stabilized with vegetation or other appropriate methods. Documentation acceptable to the ***Enforcing Official*** shall be submitted to demonstrate that the site has reached final stabilization. Upon a satisfactory demonstration, the Post-Construction BMPs may be completed and placed into service. Upon completion of the installation of the Post-Construction BMPs, all disturbed areas and/or exposed soils caused by such installation must be stabilized within two (2) days of the completion of the installation unless actually precluded by weather conditions, and in such event, as soon thereafter as weather conditions permit stabilization.

M. Removal of EP&SC BMPs: The Owner is responsible for the removal of EP&SC BMPs upon stabilization of all disturbed areas or upon completion of the project, whichever occurs first. No required EP&SC BMPs shall be removed during the permit period until the upslope areas draining to said BMP are permanently stabilized unless the removal is approved in writing by the ***Enforcing Official***.

N. Alternative Methods: Methods of erosion prevention, sediment and storm water runoff control, other than those specified by these Earthwork Regulations may be considered by the ***Enforcing Official*** on a case by case basis as provided below, and must be submitted for approval prior to use, installation or implementation.

1. The proposed alternative method shall otherwise comply with these Earthwork Regulations. Any required recalculation or redesign of any portion of the project is the sole responsibility of the Owner and shall not be provided by the reviewer.

2. The decision of the ***Enforcing Official*** as to whether to permit the proposed alternative method will be based largely on the sufficiency and completeness of the information submitted with the application.

3. The proposed alternative method will accomplish the purpose, intent and results of these Earthwork Regulations and will not otherwise cause a hazard.

4. The alternative method must be enforceable by the ***Enforcing Official***.

O. Variances: The ***Enforcing Official*** may vary a requirement set forth in Section 310 EROSION PREVENTION AND SEDIMENT CONTROL (EP&SC) BMP PERFORMANCE STANDARDS of these Earthwork Regulations if site specific conditions prevent the implementation of required EP&SC BMPs as written, the implementation of the controls will result in no environmental benefit, or the project is in an isolated, self-contained area where there will be no adverse affect on adjacent public or private properties or watercourses. Under no circumstances may a variance be granted if a Hazard will be created. A request for a variance shall be submitted to the ***Enforcing Official*** with complete detailed supporting materials and information justifying such variance and demonstrating that no Hazard will be created if the variance should be granted.

P. Access to EP&SC BMPs: Access shall be provided to the ***Enforcing*** Official and other authorized personnel to maintain proper operation and function of EP&SC BMPs during

the project. The access must include temporary or construction easements and heavy equipment access ways. These access ways must be clear of obstructions in order to facilitate maintenance of the BMPs.

311 GEOTECHNICAL PERFORMANCE STANDARDS

A. Geotechnical performance standards apply to the City of Wyoming.

B. Tops and toes of all slopes related to any Earthwork shall be designed and placed so as to maintain a condition of stability and not cause any adverse impact on adjacent property and/or to applicable stream corridor protection zones under the Stream Protection Regulations (Article IV of the Rules and Regulations of the City of Wyoming).

C. The tops and toes of all Earthwork shall be designed to be completely contained within the property being developed unless included in an easement or binding written agreement with an adjacent property owner. A Professional Engineer shall certify that the tops and toes of all slopes are set back from property boundaries or structures as necessary for:

1. Stability of adjacent property;

2. Adequacy of foundation support;

3. Protection of adjacent property against damage from storm water runoff.

D. The tops and toes of any Earthwork shall be designed and constructed in a manner that will not adversely impact existing or proposed buildings or adjacent property.

E. A complete system for proper storm water runoff management and drainage of the site involving tops and toes of Earthwork shall be provided. Such a drainage system shall be completely contained within the property being developed unless containment is not feasible, in which case runoff flows may be diverted off-site in accordance with applicable runoff standards and requirements approvable by the ***Enforcing Official***.

F. The ***Enforcing Official*** may require additional geotechnical or other engineering data and site specific designs where the tops or toes of slopes and/or the drainage system creates or may create a Hazard.

G. The ***Enforcing Official*** may waive or modify requirements under this section of these Earthwork Regulations relating to cut and fill operations if the application for the Earthwork permit includes a written opinion from a Professional Engineer employed by the Owner stating that the proposed cut and fill operations will not cause a Hazard or is in an isolated, self-contained area where there will be no adverse affect on adjacent public or private property.

H. A request for a waiver shall be submitted to the ***Enforcing Official*** with detailed evidence justifying such waiver and demonstrating that no hazard will be created if the waiver should be granted.

312 NON-SEDIMENT POLLUTION BMP PERFORMANCE STANDARDS

A. Non–Sediment Pollution BMPs: No hazardous substances, solid or liquid waste, shall be discharged from the site into a water resource, storm sewer or ditch. This includes concrete truck washout, stucco, paint, form release oils, curing compounds, fuels, oils, vehicle fluids, sanitary waste, building and landscape materials, trash, soaps, and solvents, etc. All necessary and appropriate Non-Sediment Pollution BMPs shall be implemented to prevent the discharge of these pollutants to the drainage system of the site or other surface water resources. Under no circumstances shall concrete truck wash out be directly or indirectly discharged into a ditch, storm sewer or water resource. Waste materials shall not be exposed to storm water.

B. Access To Non-Sediment Pollution BMPs: Access is required to maintain proper operation and function of Non-Sediment Pollution BMPs during the project. The access should include temporary or construction easements and heavy equipment access ways where necessary. These access ways should be clear of obstructions and can be easily maintained.

313 FINAL INSPECTION APPROVAL AND RELEASE OF RECORD PLAT

A. To receive final inspection and acceptance of any project, the following must be completed and provided to the ***Enforcing Official***:

1. Final stabilization must be achieved and all Post-Construction BMPs must be installed and made functional per the approved Improvement Plan, as determined by the ***Enforcing Official***.

2. To initiate termination of an Earthwork Permit for a project or a portion thereof and final inspection, the Owner shall submit a letter to the ***Enforcing Official*** certifying compliance with the permit requirements, stating the reason for termination, and indicating the portions of the site where termination is being requested. The permittee is also responsible for filing a notice of termination (NOT) with the Ohio EPA.

B. The City of Wyoming shall not release the Record Plat, issue a certificate of occupancy, or otherwise allow a transfer of ownership to any property that is not in full compliance with these Earthwork Regulations.

C. The City of Wyoming shall not approve and release the Record Plat for recording until receipt of a Notice of Compliance from the ***Enforcing Official*** that the site is in compliance with all provisions of these Earthwork Regulations, has received a geotechnical certification, if applicable, and has properly transferred or removed all approved EP&SC and Non-Sediment Pollution Control BMPs, including but not limited to proper installation, closure, and/or maintenance of sediment basins and traps, sediment fence and inlet protection. All idle areas must have temporary and permanent stabilization as appropriate.

314 INSPECTION AND MAINTENANCE OF EROSION PREVENTION AND SEDIMENT CONTROL (EP&SC) BMPs

A. The Construction-Phase Inspection and Maintenance Plan included in the Improvement Plans shall address all requirements of this Section.

B. All EP&SC BMPs shall be inspected and maintained to ensure continued performance of their intended function. All EP&SC BMPs designed for sediment control shall be maintained in a functional condition until all up slope areas they control are permanently stabilized and Post-Construction BMPs are operational. The EP&SC BMPs shall be designed to minimize maintenance requirements. The Improvement Plans shall provide a description of maintenance procedures needed for each measure and practice to ensure their continued performance.

C. If the inspection reveals that an EP&SC BMP 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 inspection that indicates the maintenance or repair is needed. Sediment settling ponds must be repaired or maintained within ten (10) days of the inspection that indicates the maintenance or repair is needed.

D. At a minimum, all EP&SC BMPs on the site shall be inspected by the Owner's Qualified Inspection Personnel at least once every seven (7) calendar days and within 24 hours after any storm event greater than one-half (1/2) inch of rain per 24 hour period and a record be made of the inspection. The Owner shall assign Qualified Inspection Personnel to conduct these inspections to ensure that the EP&SC BMPs are functional, to evaluate whether the EP&SC BMPs are adequate and properly implemented or constructed in accordance with the approved Improvement Plan, and to determine whether other EP&SC BMPs are required. The Qualified Inspection Personnel shall record and report issues and deficiencies associated with the EP&SC BMPs. A Professional Engineer must determine necessary changes to the location and position each EP&SC BMPs.

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

F. EP&SC BMPs identified in the plan shall be observed to ensure that they are operating correctly.

G. Discharge locations shall be inspected to ascertain whether EP&SC BMPs are effective in minimizing degradation of the receiving water resources.

H. Documentation of proper installation as per design or manufacturer's specification needs to be recorded as these EP&SC BMPs are constructed or installed.

I. To record the results of inspections, the ***Qualified Inspection Personnel*** may use the Ohio EPA's form and log, or develop their own. A copy of the inspection form and log that will be implemented shall be provided to the ***Enforcing Official*** with the Improvement Plans. The inspection reports shall be made available to the ***Enforcing Official*** and shall be kept on site. Each inspection report shall be signed and certified by the Owner. The following shall be included at a minimum: Inspector, date, weather, rainfall, discharges noted, BMP's maintenance required, inadequate BMP's, required additional BMP's and corrective action plan with implementation dates.

J. If the inspection reveals that an EP&SC BMP fails to perform its intended function and that another, more appropriate EP&SC BMP is needed to be effective, the Professional Engineer shall amend the Improvement Plans. The new EP&SC BMPs shall be installed or implemented within ten (10) days of the inspection.

K. If the inspection reveals that an EP&SC BMP has not been installed or implemented in accordance with the schedule contained in the approved plan, the EP&SC BMP must be implemented within ten (10) days from the date of the inspection. If the inspection reveals that the planned EP&SC BMP is not needed, the inspection record must contain a statement of explanation as to why the EP&SC BMP is not needed.

L. The Owner shall maintain the inspection records and logs for three years following the completion of the project. The inspection records shall include the names(s) and qualifications of personnel making the inspection, date(s) of the inspection, statement whether the facility is in compliance with the Improvement Plans at the time of the inspection, any incidents of non-compliance and any observations that significantly impact the implementation of the Improvement Plans.

315 GEOTECHNICAL MONITORING AND MAINTENANCE OF CERTAIN EARTHWORK

A. Earthwork covered under Section 311 Geotechnical Performance Standards of these Earthwork Regulations may be required by the ***Enforcing Official*** to obtain a permit and or be monitored by or under the direction of a Professional Engineer qualified in geotechnical engineering. In such case, the Professional Engineer shall certify to the ***Enforcing Official*** that the requirements under the approved plans and permit have been completed. The ***Enforcing Official*** may also require that Geotechnical and EP&SC Declaration Contracts be signed and submitted before commencing with the any Earthwork.

B. A geotechnical Earthwork permit may be required where a succession of small excavations or fills constitutes a continuing operation and the accumulation of such excavations or fills will exceed one or both of the following conditions within the area of Earthwork:

1. Five (5) feet in vertical depth; or

2. 350 cubic yards per each 5,000 square feet.

C. A geotechnical Earthwork permit shall be required in all cases where grading is proposed on existing terrain with a known history of, or showing visible evidence of, active or dormant landslides.

D. A geotechnical Earthwork permit may be required where the site is situated partially or wholly over terrain with a “high” landslide potential.

E. Any excavating or filling performed pursuant to the exemptions in Section 306 Exemptions of these Earthwork Regulations which creates a hazard and / or contributes to water quality degradation shall be subject to the provisions of these Earthwork Regulations as they relate to the specific hazard.

F. Work that meets the following provisions may be exempted from the requirement for Geotechnical Monitoring or geotechnical Earthwork permit.

1. Any excavation for a basement of a building, or other structure, either privately or publicly owned, authorized by a valid Building Permit, provided:

a. The excavation does not exceed the following:

i. Twelve (12) feet in vertical depth at its deepest point; or

ii. One (1) cubic yard per each eleven (11) square feet of work area;

b. The excavation is made within an area described as the upper 25% of the vertical distance between the top of slope and toe of slope with a slope not greater than four (4) feet horizontal to one (1) foot vertical (4:1), or in the lower 75% of the vertical distance between the top of slope and toe of slope with a slope not greater than five (5) feet horizontal to one (1) foot vertical (5:1).

2. The subsequent use of excavated material as fill on the same site, provided the fill, excluding building backfill material, does not exceed:

a. Five (5) feet in vertical depth at its deepest point; or one (1) cubic yard per each eleven (11) square feet of work area;

b. The fill is placed on site area with a slope not greater than five (5) feet horizontal to one (1) foot vertical (5:1) and

c. The fill does not result in a finished slope steeper than three (3) feet horizontal to one (1) foot vertical (3:1).

3. Any other excavation or fill:

a. That does not exceed: five (5) feet in maximum vertical depth; or one (1) cubic yard per each fourteen (14) square feet of work area; and

b. Is made within an area with a slope not steeper than five (5) feet horizontal to one (1) foot vertical (5:1); and

c. Does not result in a finished slope steeper than four (4) feet horizontal to one (1) foot vertical (4:1); and

d. Does not necessitate any adjustment, relocation, addition or other modification to any existing storm sewer system.

G. Excavating and filling operations subject to geotechnical monitoring shall be conducted under the direction of and monitored by the Owner and a Professional Engineer qualified in geotechnical engineering employed by the Owner. The Professional Engineer shall certify to the ***Enforcing Official***, the completion of the requirements of the geotechnical report/plan and Permit. The Professional Engineer shall certify the existing, proposed, and long term stability of all cuts and fills subject to geotechnical monitoring to the ***Enforcing Official***. Waivers or modifications shall be made pursuant to Section 311 (H) of these Earthwork Regulations

316 INSPECTION AND MAINTENANCE OF NON-SEDIMENT POLLUTION BMPs

A. The Construction-Phase Inspection and Maintenance Plan included in the Improvement Plans shall address all requirements of this Section.

B. All Non-Sediment Pollution BMPs shall be inspected and maintained to ensure continued performance of their intended function. All Non-Sediment Pollution BMPs shall be maintained in a functional condition until all construction activities served by these BMPs are complete and Post-Construction BMPs are operational. The Non-Sediment Pollution BMPs shall be designed to minimize maintenance requirements. The Improvement Plans shall provide a description of maintenance procedures needed for each measure and practice to ensure their continued performance.

C. If the inspection reveals that a BMP is in need of repair or maintenance, it must be repaired or maintained within three (3) days of the inspection that indicates the maintenance or repair is needed.

D. At a minimum, all Non-Sediment Pollution BMPs on the site shall be inspected by the Owner's ***Qualified Inspection Personnel*** 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 a record be made of the inspection. The Owner shall assign ***Qualified Inspection Personnel*** to conduct these inspections to ensure that the Non-Sediment Pollution BMPs are functional, to evaluate whether the Non-Sediment Pollution BMPs are adequate and properly implemented or constructed in accordance with the approved Improvement Plan, and to determine whether other measures or practices are required. The ***Qualified Inspection Personnel*** shall record and report issues and deficiencies associated with the BMPs. A Professional Engineer must determine necessary changes to the location and position each Non-Sediment Pollution BMP.

E. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be included in the inspections required under this Section for evidence of or the potential for pollutants entering the drainage system.

F. Discharge locations shall be inspected to ascertain whether Non-Sediment Pollution BMPs are effective in minimizing degradation of the receiving water resources.

G. Documentation of proper installation as per design or manufacture's specification needs to be recorded as Non-Sediment Pollution BMPs are constructed or installed.

H. To record the results of inspections, the ***Qualified Inspection Personnel*** may use the Ohio EPA's form and log or develop their own. A copy of the inspection form and log that will be implemented shall be provided to the ***Enforcing Official*** with the Improvement Plans. The inspection reports shall be made available to the ***Enforcing Official*** and shall be kept on site. Each inspection report shall be signed and certified by the Owner.

I. If the inspection reveals that a Non-Sediment Pollution BMP fails to perform its intended function and that another, more appropriate Non-Sediment Pollution BMPs is needed to be effective; the Professional Engineer shall amend the Improvement Plans to include the appropriate new Non-Sediment Pollution BMP. The new Non-Sediment Pollution BMPs shall be installed or implemented within ten (10) days of the inspection.

J. If the inspection reveals that a Non-Sediment Pollution BMP has not been installed or implemented in accordance with the schedule contained in the approved plan, the Non-Sediment Pollution BMPs must be implemented within ten (10) days from the date of the inspection. If the inspection reveals that the planned Non-Sediment Pollution BMP is not needed, the inspection record must contain a statement of explanation as to why the Non-Sediment Pollution BMP is not needed.

K. The Owner shall maintain the inspection records and logs for three (3) years following the completion of the project. The inspection records shall include the names(s) and qualifications of personnel making the inspection, date(s) of the inspection, statement whether the facility is in compliance with the Improvement Plans at the time of the inspection, any incidents of non-compliance and any observations that significantly impact the implementation of the Improvement Plans.

317 FEES

A. All fees required to enforce these Earthwork Regulations shall be established by the City of Wyoming.

318 PERFORMANCE BOND

A. An EP&SC Performance Bond ("Performance Bond") shall be posted to an agency of the controlling jurisdiction designated by the ***Enforcing Official*** for Earthwork that disturbs one (1) acre or more. The Performance Bond shall be obtained by the Owner prior to the recording of the Record Plat.

B. The Performance Bond shall be posted for the benefit of the City of Wyoming, for the purpose of assuring that the work shall be undertaken and completed in accordance with the approved plans and specifications of the Earthwork Permit.

C. The Performance Bond amount, as calculated by the ***Enforcing Official***, shall be based on the cost associated with the performance of maintenance of sediment basins and traps. The Bond amount for maintenance of sediment basins and traps shall be calculated at a rate of fifty dollars ($50) per cubic yard based on the designed volume of each sediment basin or trap. The Enforcing Official may increase the Bond amount for sediment basin and trap maintenance when access to said practices will require additional work to perform the maintenance due to the location of said control.

D. The ***Enforcing Official*** shall release the Performance Bond for sediment basin and trap maintenance upon acceptance of the Record Plat.

E. In the event the Owner is also subject to a Building Permit, all requirements of the site plans and Earthworks permit shall be certified as complete by the Owner's Professional Engineer prior to the issuance of a permanent Certificate of Occupancy. The bonding of uncompleted work in this situation will not be permitted.

F. Where Earthwork is left abandoned and/or a hazard is created, and no bond is in effect, the ***Enforcing Official*** may seek to mitigate the situation as provided in Section 319 ENFORCEMENT.

319 ENFORCEMENT

A. It shall be unlawful for any Owner to fail to comply with any of the requirements of these Earthwork Regulations or any lawful order issued by the ***Enforcing Official*** pursuant thereto, including the failure to pay any authorized civil penalty lawfully issued hereunder.

B. The ***Enforcing Official*** shall have all such rights and powers in interpreting and enforcing these Earthwork Regulations as may be accorded to such officials by law, rule, or regulation.

C. The ***Enforcing Official*** bearing proper credentials and identification shall be permitted at all reasonable times to enter upon all properties to inspect, survey, test, photograph or videotape an Earthwork to determine compliance with these Earthwork Regulations. The ***Enforcing Official*** shall be granted access without unreasonable delay. Any obstruction preventing safe and easy access to the Earthwork shall be promptly removed or cleared upon request of the ***Enforcing Official***. The cost of removing or clearing obstructions shall be the responsibility of the Owner. The ***Enforcing Official*** shall be entitled to examine and copy any records required to be prepared and maintained under these Earthwork Regulations or applicable permit.

D. The ***Enforcing Official*** may issue an immediate Stop Work Order (SWO) if Earthwork requiring an Earthwork Permit, local permit, state permits, or federal Permit necessary for Erosion and Sediment Pollution Controls, earth movement, clearing, or cut and fill activity is being done without the required permit.

E. Whenever the ***Enforcing Official*** determines that any Earthwork has become a hazard and/or causes or contributes to a violation of any provision of these Earthwork Regulations, the ***Enforcing Official*** may issue a Notice Of Violation (NOV) directing the Owner to correct or alleviate the hazard and/or water quality degradation within thirty (30) days and/or issue a Notice of Intent to Revoke Performance Bond.

F. If after a period of thirty (30) days after the original NOV, the violation continues the ***Enforcing Official*** shall issue a second Notice of Violation (NOV) directing the owner to correct or alleviate the hazard and/or water quality degradation within fifteen (15) days.

G. If after a period of fifteen (15) days after the second NOV, the violation continues the ***Enforcing Official*** shall proceed with enforcement as provided under these Earthwork Regulations, including (1) issuing a stop work order under Paragraph E below and (2) proceeding to revoke the Performance Bond according to Section 319(H) of these Earthwork Regulations. Earthwork stopped, abandoned by the Owner, or otherwise left un-stabilized for a period of fifteen (15) consecutive days after issuance of the second NOV for a particular infraction shall cause the Earthwork Permit to expire and become invalid. The Owner shall complete all necessary precautions, as determined by the ***Enforcing Official,*** which in his sole judgment are required to ensure that the stopped, abandoned or unstable Earthwork does not become a hazard or nuisance to human health or the environment.

H. In addition to any other enforcement authorized herein, the ***Enforcing Official*** may issue a Stop Work Order whenever:

1. Earthwork requiring an Earthwork Permit, local permit, state permits, or federal Permit necessary for EP&SC, earth movement, clearing, or cut and fill activity is being done without the required permit;

2. Any Earthwork is being performed or has been performed that is not in compliance with applicable Flood Plain Regulations***.*** The ***Enforcing Official*** may order that all fill placed within the regulated flood plain without approval be removed from the flood plain until all applicable Approvals for the fill have been

obtained.

3. Permitted Earthwork is being done contrary to the terms and conditions of the permit and the ***Enforcing Official*** has issued two NOVs (30 and 15 days respectively) and the ***Enforcing Official*** has obtained written approval from the City of Wyoming's solicitor if, in the opinion of the solicitor, the violation is egregious;

4. Earthwork is causing or threatens to cause a hazardous condition or imminent and substantial degradation of a water resource and the ***Enforcing Official*** has issued two Notice of Violations (30 and 15 days respectively) and has obtained written approval from the City of Wyoming's solicitor if, in the opinion of the solicitor, the violation is egregious;

I. A Stop Work Order shall remain in effect until (1) all required local, state, and or federal permits are issued; (2) the hazardous condition and/or water quality degradation is remedied to the satisfaction of the ***Enforcing Official***; or (3) the violative work is remedied and performed in full accordance with the Permit and these Earthwork Regulations.

J. Notwithstanding these Earthwork Regulations, if the ***Enforcing Official*** finds that any Earthwork poses an imminent and substantial endangerment to any property, or an imminent and substantial degradation of a water resource, the ***Enforcing Official*** may seek to secure such relief as may be necessary and appropriate to abate such danger or threat, to ensure compliance with these Earthwork Regulations and that public health and the environment is protected.

K. If a proceeding to revoke a Performance Bond is initiated under Section 319(F) of these Earthwork Regulations, the ***Enforcing Official*** shall give the Owner five (5) business days following issuance of a stop work order to resolve the violation and the ***Enforcing Official*** shall inform the Owner that the Performance Bond shall thereafter be revoked in the event of continuing noncompliance.. The ***Enforcing Official*** shall meet with the Owner at the conclusion of the five (5) day period, and if the violations still exist at that time, the ***Enforcing Official*** shall proceed with the liquidation of the Performance Bond and undertake with the proceeds to complete the work to resolve the violation.

320 APPEALS

A. Any Owner aggrieved by a decision of the ***Enforcing Official*** in the denial of an Earthwork Permit, a condition of an issued Earthwork Permit, a NOV, or other action of the ***Enforcing Official*** shall have fifteen (15) calendar days from the date of receipt of such written decision to file a written appeal to the City Manager.

B. Any aggrieved Owner shall set forth in a written notice of appeal the interpretation, ruling or order appealed from, and the provisions of these Earthwork Regulations and related laws and ordinances involved and shall state wherein the interpretation, ruling or order is unlawful or erroneous.

321 PENALTY

A. Any person, whether Owner, agent of the Owner, or person having control of any property, who violates any of the Earthwork provisions of these Earthwork Regulations,

or fails to conform to any of the provisions thereof, or fails to obey any order covered by this Permit and issued by the ***Enforcing Official***, shall be subject to a such civil or criminal penalties as may be provided under applicable law, including a civil fine of not less than one hundred dollars ($100) nor more than five hundred dollars ($500) in accordance Section 307.79 of the ORC. Each day of violation of these Earthwork Regulations or an order issued under the Earthwork Regulations shall be considered a separate violation subject to a civil fine.

Appendix G

SWP3 Review Checklist

Storm Water Pollution Prevention Plan (SWP3) Checklist for Construction Activities (OHC000004)

Facility Name:	Date SWP3 Received:
SWP3 Reviewer:	Date SWP3 Reviewed:

Part III.G.1 - Site Description				
Does the SWP3…..	**Y**	**N**	**N/A**	**Comments**
(a) describe the nature and type of construction activity (e.g., low density residential, shopping mall, highway, etc.)?				
(b) describe the total area of the site that is expected to be disturbed (i.e., the area of grubbing, clearing, excavating, filling, or grading including off-site borrow areas)?				
(c) include a calculation of the runoff coefficients for both the pre-construction and post-construction site conditions?				
(d) include an estimation of the impervious area and percent imperviousness as a result of the construction activity?				
(e) include any existing data describing the soil? *NOTE: If this data is not available, it does not need to be included.*				
provide any information on the quality of the storm water discharge from the construction site? *NOTE: If this data is not available, it does not need to be included.*				
(f) include any information about prior land uses at the site (e.g., was the property used to manage solid or hazardous waste)?				
(g) include 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) include the name(s) or location(s) of the initial and subsequent surface water bodies receiving the storm water discharge?				
include the areal extent and description of the wetland or other special aquatic sites which will be disturbed and/or will receive the storm water discharges?				
(i) include a detail drawing of a typical individual lot with shown sediment and erosion controls for construction sites with no centralized sediment controls (e.g., a sediment settling pond or inlet protection), which receives drainage from multiple lots?				
(j) include the location and description of storm water discharges associated with dedicated asphalt and/or concrete batch plants covered by the NPDES construction storm water general permit?				
(k) include a copy of the NPDES construction storm water general permit?				
(l) include a cover page identifying the name and location of the site, the name and contact information for site operators and SWP3 authorization agents as well as preparation date, start date, and completion date?				
(m) include a modification log to be updated in the field?				

Part III.G.1.n - Site Map Requirements				
Does the SWP3 site map…..	**Y**	**N**	**N/A**	**Comments**
(i) describe the limits of earth-disturbing activity of the site including associated off-site borrow or spoil areas that are not addressed by a separate NOI and associated SWP3?				
(ii) describe the soils types depicted for all areas of the site, including locations of unstable or highly erodible soils?				
(iii) show existing and proposed contours to delineate drainage watersheds expected during and after major grading activities as well as the size of each drainage watershed, in acres?				
(iv) show surface water locations including springs, wetlands, streams, lakes, water wells, etc., on or within 200 feet of the site, including the boundaries of wetlands or stream channels and first subsequent named receiving water(s) the permittee intends to fill or relocate for which the permittee is seeking approval from the Army Corps of Engineers and/or Ohio EPA?				
(v) include the location of existing and planned buildings, roads, parking facilities, and utilities?				
(vi) include the location of all erosion and sediment control practices, including the location of areas likely to require temporary stabilization during the course of site development?				
(vii) include the location of sediment and storm water management basins noting their sediment settling volume and contributing drainage area?				
(viii) include the location of permanent storm water management practices to be used to control pollutants in storm water after construction operations have been completed?				
(ix) include areas designated for the storage or disposal of solid, sanitary, and toxic wastes (including dumpster areas), areas designated for cement truck washout, and areas for vehicle fueling?				
(x) include the location of designated construction entrances where the vehicles will access the construction site?				
(xi) include the location of any in-stream activities including stream crossings?				

Part III.G.2 - Sediment & Erosion Controls				
(a) Non-Structural Preservation Methods	**Y**	**N**	**N/A**	**Comments**
(1) Has every effort been made to preserve the natural riparian setback adjacent to streams or other surface water bodies?				
(2) Have efforts been made to phase in construction activities in order to minimize the amount of land disturbance at one time?				
(3) Will any portions of the site be left undisturbed (e.g., tree preservation areas)?				
(b) Erosion Controls	**Y**	**N**	**N/A**	**Comments**
(1) Does the SWP3 describe the control practices used to restabilize areas after grubbing or construction?				
(2) Does the SWP3 specify the types of stabilization measures to be employed for any time of the year?				
(b)(2)(i) Temporary Stabilization	**Y**	**N**	**N/A**	**Comments**
For disturbed areas within 50 feet of a stream remaining dormant for over 14 days, will temporary erosion controls be applied within 2 days?				

For disturbed areas over 50 feet away from a stream remaining dormant for over 14 days, will temporary erosion controls be applied within 7 days?				
For disturbed areas that will be left idle over winter, will temporary erosion controls be applied prior to onset of winter weather?				
(b)(2)(i) Permanent Stabilization	**Y**	**N**	**N/A**	**Comments**
For disturbed areas within 50 feet of a stream at final grade, will permanent erosion controls be applied within 2 days of reaching final grade?				
For disturbed areas remaining dormant for over 1 year or at final grade, will permanent erosion controls be applied within 7 days?				
(c) Runoff Control Practices	**Y**	**N**	**N/A**	**Comments**
(1) Does the SWP3 incorporate measures to reduce flow rates (e.g., riprap, ditch check dams)?				
(2) Does the SWP3 incorporate measures to divert concentrated flow (e.g., pipe slope drains)?				
(d) Sediment Control Practices	**Y**	**N**	**N/A**	**Comments**
(1) Will sediment control devices be implemented for all areas remaining disturbed for over 14 days?				
(2) Are detail drawings of the sediment controls to be used included in the SWP3?				
(d)(i) Timing of Installing Sediment Controls	**Y**	**N**	**N/A**	**Comments**
Does the SWP3 specify that sediment controls will be installed/implemented within 7 days of grubbing activities?				
Does the SWP3 propose alternate sediment controls for the changing slopes and topography?				
(d)(ii) Sediment Settling Ponds	**Y**	**N**	**N/A**	**Comments**
Does the SWP3 include the installation and use of a sediment settling pond? *NOTE: Sediment settling ponds are required for all drainage areas of 10 or more acres of land disturbed at one time, when there is concentrated runoff (storm sewer or ditch), or when the design capacity of silt fence or inlet protection has been exceeded.*				
For construction activities that require sediment settling pond(s), does the SWP3 propose to implement alternative controls to sediment settling ponds? *NOTE: Alternative controls must be equivalent in effectiveness to a sediment settling pond.*				
Is the dewatering volume of the sediment settling pond sized to receive at least 67 cubic yards (1800 cubic feet) of storm water per acre of total drainage area?				
Will a skimmer or other device be used to dewater the pond at the surface? *NOTE: Sediment settling ponds are required to be dewatered at the surface unless dewatering the pond at the surface is infeasible.*				
Is the maximum depth of each sediment settling pond less than or equal to 5 feet?				
Does the dewatering device (e.g., a skimmer) meet the design standards of Ohio's Rainwater and Land Development Manual?				
Will the dewatering volume drain down time in between 48 hours and 72 hours?				
Will the first half of the dewatering volume drain in no less than one-third of the total drain time?				
Is the sediment storage zone volume of the pond at least 1000				

cubic feet per disturbed acre (Method 1)?				
If not, was RUSLE method (Method 2) used to calculate the sediment storage zone volume?				
Is the length to width ratio of the sediment settling pond at least two units of length for every one unit of width (> 2:1 length to width)? *NOTE: The greater the distance from the storm water inlet into the pond to the storm water outlet, the greater likelihood of sediment settlement. This prevents short-circuiting of the pond.*				
Will the sediment storage zone of the pond be cleaned out when the silt occupies 40 percent of the sediment storage zone (approximately one-half of the sediment storage zone depth)?				
Is the sediment settling pond designed to consider public (i.e., child) safety where site limitations preclude a safe design?				
(d)(iii) Silt Fence & Other Diversions	**Y**	**N**	**N/A**	**Comments**
Will silt fence or other diversions be used to control sheet flow?				
Will silt fence be used in areas of steep slopes or concentrated flow? *NOTE: Silt fence is not permitted to be used for controlling high velocity storm water flow (only sheet flow).*				

Design Capacity of Silt Fence

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

(d)(iv) Inlet Protection	**Y**	**N**	**N/A**	**Comments**
Will the field drain inlets and/or the street curb inlets drain into a sediment settling pond or directly to surface waters of the state? *NOTE: Inlet protection is mandatory where sediment settling ponds will not be implemented.*				
Do any inlets not connected to a sediment settling pond receive runoff from one or more acres?				
Does the inlet protection meet the standards of Ohio's Rainwater and Land Development Manual?				
(d)(v) Stream Protection	**Y**	**N**	**N/A**	**Comments**
Does the SWP3 propose to use any structural sediment controls in a stream? *NOTE: Use of structural sediment controls in-stream is prohibited in accordance with Part III.G.2.d.v.*				
For construction activities that are on the stream bank or will involve stream crossing, does the SWP3 include measures to minimize the number of stream crossings and/or the width of disturbance? *NOTE: If work along a stream bank is necessary, a non-erodible pad or non-erodible stream diversion dams (sand bags) must be installed. If stream crossings are necessary, a non-erodible stream crossing must be installed.*				

Part III.G.2.e – Post-Construction Storm Water Management

	Y	N	N/A	Comments
Does the SWP3 include the installation of a structural post-construction best management practice (BMP) to manage storm water runoff once construction activities have been completed?				
Will the construction activity result in the installation of any impervious surface? *NOTE: Projects that do not result in the installation of impervious surface do not require the installation of post-construction BMPs.*				
Has a long-term maintenance plan been developed or included in the SWP3 for maintenance of the structural post-construction BMP? *NOTE: The long-term maintenance plan must be developed and provided to the post-construction site operator, but does not need to be implemented as required by this permit. Local municipalities may require maintenance plan implementation.*				
Is the construction activity a linear project (e.g., pipeline or utility line installation) that does not result in the installation of impervious surface? *NOTE: Linear projects that don't result in the installation of impervious surface do not need the installation of structural post-construction BMPs.*				
Large Construction Activities (≥ 5 Acres)	**Y**	**N**	**N/A**	**Comments**
Does the SWP3 include a structural post-construction BMP with a specified volume and drain time?				
If so, was one of the two methods proposed in the NPDES construction storm water general permit (CGP) used to determine the water quality volume (WQv) and drain time?				
If the formula described in the CGP was used to calculate the WQv, were the correct values used for:				
(a) runoff coefficient (C)?				
(b) precipitation depth (P = 0.75-inches)?				
(c) and the drainage area (A) to the BMP?				
If the structural post-construction BMP will be used for sediment storage and/or has a reduced infiltration capacity, was the WQv increased by an additional 20 percent ("fudge factor")?				
Does the drain time in the SWP3 for the proposed structural post-construction BMP match the drain time for the selected BMP in the table below?				

Target Drain Times for Structural Post-Construction BMPs

Best Management Practice	Drain Time of WQv
Infiltration Basin or Trench[1]	48 hours
Permeable Pavement - Infiltration[1]	48 hours
Permeable Pavement – Extended Detention	24 hours
Dry Extended Detention Basin[2]	48 hours
Wet Extended Detention Basin[3]	24 hours
Constructed Wetland (above permanent pool)[4]	24 hours
Sand & Other Media Filtration[5]	24 hours
Bioretention Cell[5,6]	24 hours
Pocket Wetland[7]	24 hours

1 Practices that are designed to fully infiltrate the WQv (basin, trench, permeable pavement) shall empty within 48 hours to provide storage for the subsequent storm events.

2 Dry basins must include forebay and micropool each sized at 10% of the WQv.

3 Provide both a permanent pool and an EDv above the permanent pool, each sized at 0.75 WQv.

4 Extended detention shall be provided for the WQv above the permanent water pool.

5 The surface ponding area (WQv) shall completely empty within 24 hours so that there is no standing water. Shorter drawdown times are acceptable as long as design criteria in Ohio's Rainwater and Land Development manual have been met.

6 This would include Grassed Linear Bioretention which was previously called Enhanced Water Quality Swale.

7 Pocket wetlands must have a wet pool equal to the WQv, with 25% of the WQv in a pool and 75% in marshes. The EDv above the permanent pool must be equal to the WQv.

Large Construction Activities (Continued)	**Y**	**N**	**N/A**	**Comments**
If the SWP3 proposes to use an alternative BMP instead of one of the BMPs listed in the table above, is the alternative BMP equivalent in effectiveness to the BMPs listed above?				
Is there a pre-existing drainage basin or other BMP that will receive the storm water drainage from the construction site, is it sized appropriately to treat the WQv?				
For public road construction activities, are the post-construction BMPs designed consistent with the Ohio Department of Transportation's "Location and Design Manual, Volume Two?"				
For construction activities where a post-construction BMP cannot be placed onsite and will require an offsite post-construction BMP, has the offsite mitigation proposal been authorized by Ohio EPA? *NOTE: Offsite BMPs must have a long-term maintenance agreement, be within the same HUC, and be at least 1.5 times the size of an onsite BMP.*				
For redevelopment projects which disturb 5 or more acres of land, was one of the following options used to as a post-construction practice:				
(a) 20% reduction in impervious area?				
(b) a BMP sized to treat 20% of the WQv?				
(c) or a combination of (a) and (b) above?				
For construction activities where non-structural post-construction BMPs are proposed, has the substitution of structural BMPs with non-structural BMPs been authorized?				
For construction activities where alternative post-construction BMPs are proposed, has the alternative BMP been authorized by Ohio EPA? *NOTE: Alternative BMPs must have TARP Tier II acceptance, be able to remove 80% of total suspended solids (TSS) in the runoff, and be able to treat the WQv unless hydrologic impacts are not necessary.*				
Has the local municipality authorized the use of an alternative post-construction BMP?				
Small Construction Activities (≥ 1 Acre, but < 5 Acres)	**Y**	**N**	**N/A**	**Comments**
Does the SWP3 include a structural post-construction BMP? *NOTE: A structural post-construction BMP is required for small construction activities, but the design standards have not been specified in the CGP.*				
(i) If so, does the SWP3 explain the technical basis used to select the BMPs chosen where flows exceed pre-development levels?				
(ii) Does the SWP3 include the installation of velocity dissipation devices at discharge locations and outfall channels?				

Part III.G.2.f - Surface Water Protection				
	Y	N	N/A	Comments
Does the construction site contain any streams, rivers, lakes, or wetlands?				
If so, has the U.S. Army Corps of Engineers been contacted for a determination of impacts requiring Clean Water Act 401 or 404 permitting?				
For storm water discharges from BMPs into wetlands, have BMPs (e.g., level spreaders, buffers, or infiltration basins) been proposed to diffuse the concentrated flow into non-erosive flow?				

Part III.G.2.g - Non-Sediment Pollutant Controls				
Handling of Toxic or Hazardous Materials	**Y**	**N**	**N/A**	**Comments**
(1) Does the SWP3 provide directions on how to dispose toxic or hazardous wastes properly?				
(2) Does the SWP3 provide areas for recycling of used or unused hazardous materials? *NOTE: No toxic or hazardous wastes shall be disposed into storm drains, septic tanks, or by burying, burning, or mixing the wastes.*				
Waste Disposal	**Y**	**N**	**N/A**	**Comments**
Will containers (e.g., dumpsters, drums) be available for disposal of debris, trash, hazardous or petroleum wastes? *NOTE: All containers must be covered and leak-proof.*				
Clean Hard Fill	**Y**	**N**	**N/A**	**Comments**
(1) Are bricks, hardened concrete, and soil waste free from contamination which may leach constituents to waters of the state?				
(2) If clean construction wastes will be disposed into the property, are there any local prohibitions from this type of disposal?				
Construction & Demolition Debris	**Y**	**N**	**N/A**	**Comments**
Does the SWP3 state that all construction & demolition debris (C&DD) waste will be disposed of in an Ohio EPA approved C&DD landfill as required by Ohio Revised Code (ORC) 3714? *NOTE: Construction debris may be disposed of on-site, but demolition debris must be disposed in an Ohio EPA approved landfill. Materials which contain asbestos must comply with air pollution regulations (see Ohio Administrative Code 3745-20).*				
Construction Chemical Compounds	**Y**	**N**	**N/A**	**Comments**
(1) Does the SWP3 designate areas used for mixing or storage of compounds such as fertilizers, lime, asphalt, or concrete?				
(2) If so, are these areas located away from watercourses, drainage ditches, field drains, or other storm water drainage areas?				
Equipment Fueling & Maintenance	**Y**	**N**	**N/A**	**Comments**
(1) Does the SWP3 designate areas used for fueling or performing vehicle maintenance?				
(2) If so, are these areas located away from watercourses, drainage ditches, field drains, or other storm water drainage areas?				
(3) Has a spill prevention control and countermeasures (SPCC) plan been developed? *NOTE: A SPCC plan must be developed for sites with one above ground storage tank (AST) of 660*				

gallons or more, total above ground tank storage of 1330 gallons, or below ground storage of 42,000 gallons of fuel.				
Concrete Wash Waters	**Y**	**N**	**N/A**	**Comments**
(1) Does the SWP3 designate areas used for receiving concrete chute or other concrete wash waters?				
(2) If so, are these areas located away from watercourses, drainage ditches, field drains, or other drainage areas?				
Trench & Ground Water Control	**Y**	**N**	**N/A**	**Comments**
Does the construction site have an onsite trench or pond that must be dewatered?				
If so, does the SWP3 call for the discharge of potentially turbid water through a filter bag, sump pit, or other sediment removal device?				
Contaminated Soils	**Y**	**N**	**N/A**	**Comments**
Does the SWP3 address proper handling and disposal of soils contaminated by petroleum or other chemical spills? *NOTE: All contaminated soils must be treated and/or disposed in Ohio EPA approved solid waste management facilities or hazardous waste treatment, storage or disposal facilities (TSDFs).*				
If the facility contains contaminated soil, which of the following practices will be used to prevent contamination from being released?				
(1) The use of berms, trenches, and pits to collect contaminated runoff and prevent discharges				
(2) Pumping runoff into a sanitary sewer (with prior approval of the sanitary sewer operator) or into a container for transport to an appropriate treatment/disposal facility				
(3) Covering areas of contamination with tarps or other methods that prevent storm water from coming into contact with the material				
Spill Reporting Requirements	**Y**	**N**	**N/A**	**Comments**
(1) Does the SWP3 describe what to do in the event of a small release (less than 25 gallons) of petroleum waste? *NOTE: Petroleum based and concrete curing compounds must have special handling procedures.*				
(2) Does the SWP3 describe what to do in the event of a larger release (25 or more gallons) of petroleum waste? *NOTE: You must contact, Ohio EPA (at 1-800-282-9378), the local fire department, and the local emergency planning committee (LEPC) within 30 minutes of a spill of 25 or more gallons.*				
Open Burning	**Y**	**N**	**N/A**	**Comments**
(1) Is open burning performed in a restricted area (as defined in OAC 3745-19)? *NOTE: Open burning is permitted in restricted areas for barbeques, heating, and certain occupational purposes.*				
(2) Is open burning performed in a non-restricted area, but within 1,000 feet of an inhabited building away from the property? *NOTE: Open burning in an unrestricted area is limited to scrap lumber, wooden fence posts, agricultural, land-clearing, or landscape wastes.*				
Dust Controls/Suppressants	**Y**	**N**	**N/A**	**Comments**
(1) Are dust suppressants proposed to be used in the SWP3?				
(2) If so, are the areas which the dust suppressant will be applied located near catch basins for storm sewers or other				

drainage ways? *NOTE: Used oil may not be used as a dust suppressant.*				
Air Permitting Requirements	**Y**	**N**	**N/A**	**Comments**
(1) Have appropriate measures been taken to ensure that all air pollution permits have been obtained? *NOTE: Air pollution permits may be required for activities including, but not limited to, mobile concrete batch plants, mobile asphalt plants, concrete crushers, and large generators.*				
(2) For restoration or demolition projects, will a notification be submitted to Ohio EPA, Division of Air Pollution Control to determine if asbestos corrective actions are required?				
Process Wastewater/Leachate Management	**Y**	**N**	**N/A**	**Comments**
Will all process wastewaters (e.g., equipment washing, leachate associated with on-site waste disposal, and concrete wash-outs) be collected and disposed of properly (e.g., to a publicly-owned treatment works)? *NOTE: The NPDES construction storm water general permit only authorizes the discharge of storm water and certain uncontaminated non-storm waters. The discharge of non-storm waters to waters of the state may be in violation of local, state, and federal laws or regulations.*				
Additional Concerns	**Y**	**N**	**N/A**	**Comments**
For construction activities involving the installation and/or replacement of a centralized sanitary system, (including sewer extensions) or a sewerage system (except those serving one, two, and three family dwellings) and potable water lines, was a PTI application submitted to Ohio EPA? *NOTE: Coverage under the NPDES construction storm water general permit does not alone authorize the installation of such sanitary sewerage systems or potable water lines.*				
Does the SWP3 include measures for implementing good housekeeping practices?				
Does the SWP3 promote the use of protected storage areas for industrial or construction materials to minimize exposure of such materials to storm water?				

Part III.G.2.i - Inspections				
	Y	**N**	**N/A**	**Comments**
Does the SWP3 require weekly inspections of BMPs and an inspection within 24 hours after every rain event of 0.5 inches within a 24 hour period?				
If the site will be dormant for a long period, it's stabilized, and less frequent inspections are desired, does the SWP3 call for a waiver request to be submitted to OEPA for a reduction to monthly inspections?				
Does the SWP3 state that only "qualified inspection personnel" will perform the inspections?				
Does the SWP3 state that an inspection checklist will be completed and signed by the inspector after every inspection?				
Does the SWP3 state that inspection records will be kept for 3 years after termination of construction activities?				
For BMPS that require repair or maintenance, does the SWP3 specify non-sediment pond BMPs to be repaired within 3 days of inspection and sediment ponds to be repaired or cleaned out within 10 days of inspection?				

For BMPs not meeting the intended function, does the SWP3 state that a new BMP will be installed within 10 days of the inspection?				
For missing BMPs required for installation by the SWP3, does the SWP3 state that the missing BMPs will be installed within 10 days of the inspection?				

Appendix H

Erosion and Sediment Control Inspection Form

Construction Site Inspection Checklist for OHC000005

By making use of some simple Best Management Practices (BMPs) a construction site operator can do his or her share to protect Ohio's water resources from the harmful effects of sediment. The topography of the site and the extent of the construction activities will determine which of these practices are applicable to any given site, but the BMPs listed here are applicable to most construction sites. For details on the installation and maintenance of these BMPs, please refer to the current ***Rainwater and Land Development****, Ohio EPA's Standards for Storm Water Management Land Development and Urban Stream Protection*. The manual is available at http://epa.ohio.gov/dsw/storm/technical_guidance.

Temporary Stabilization

This is the most effective BMP. All disturbed areas that will lie dormant for over 14 days must be stabilized within 7 days of the date the area becomes inactive. The goal of temporary stabilization is to provide cover, quickly. Areas within 50 feet of a stream must be stabilized within 2 days of inactivity. This is accomplished by seeding with fast-growing grasses then covering with straw mulch. Apply only mulch between November 1 and March 31. To minimize your costs of temporary stabilization, leave natural cover in place for as long as possible. Only disturb areas you intend to work within the next 14 days.

Construction Entrances

Construction entrances are installed to minimize off-site tracking of sediments. A stone access drive should be installed at every point where vehicles enter or exit the site. Every individual lot should also have its own drive once construction on the lot begins.

Sediment Ponds

Sediment ponds are required for construction areas with concentrated runoff or when the design capacity of silt fence or inlet protection is exceeded. There are two types of sediment ponds: sediment basins and sediment traps. A sediment trap is appropriate where the contributing drainage area is 5 acres or less. The outlet is an earthen embankment with a simple stone spillway. A sediment basin is appropriate for drainage areas larger than 10 acres. The outlet is an engineered riser pipe with a skimmer or similar device used to dewater the pond at the surface. Often a permanent storm water management pond, such as a retention or detention basin, can be modified to act as a sediment basin during construction. All sediment ponds must be installed within 7 days of first grubbing the area they control, provide a minimum dewatering zone of 67 cubic yards per acre of total contributing drainage area and a sediment settling zone of 34 cubic yards per disturbed acre below the level of the outlet. Sediment basins must be designed to drain the dewatering zone over a 48-hour period.

Sediment Barriers

This is typically used at the perimeter of a disturbed area. It's only for small drainage areas on relatively flat slopes or around small soil storage piles. Not suitable where runoff is concentrated in a ditch, pipe or through streams. For large drainage areas where flow is concentrated, collect runoff in diversion berms or channels and pass it through a sediment pond prior to discharging it from the site. Combination barriers constructed of silt fence supported by straw bales or silt fence embedded within rock check dams may be effective within small channels. As with all sediment controls, sediment barriers must be capable of pooling runoff so that sediment can settle out of suspension. Sediment barriers must be installed within 7 days of first grubbing the area it controls.

Inlet Protection

This must be installed on all yard drains and curb drains when these inlets do not drain to a sediment trap or basin. Even if there is a sediment trap or basin, inlet protection is still recommended, as it will increase the overall sediment removal efficiency. These are best used on roads with little or no traffic. If working properly, inlet protection will cause water to pond. If used on curb inlets, streets will flood temporarily during heavy storms. Check with your municipality before installing curb inlet protection. They may prefer an alternate means of sediment control such as silt fence or ponds.

Permanent Stabilization

All areas at final grade must be permanently stabilized within 7 days of reaching final grade. This is usually accomplished by using seed and mulch, but special measures are sometimes required. This is particularly true in drainage ditches or on steep slopes. These measures include the addition of topsoil, erosion control matting, rock rip-rap or retaining walls. Permanent seeding should be done March 1 to May 31 and August 1 to September 30. Dormant seeding can be done from November 20 to March 15. At all other times of the year, the area should be temporarily stabilized until a permanent seeding can be applied.

Non-Sediment Pollution Control

Although sediment is the pollutant of greatest concern on most construction sites, there are other sources of pollution. Most of these BMPs are easy to implement with a little bit of planning and go a long way toward keeping your site clean and organized. Please be sure to inform all contractors how these BMPs affect their operations on the site, particularly those that will be working near a stream.

Inspection Sheet

INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING

GENERAL INSPECTION INFORMATION

Construction Site Inspection Date: _____ Inspector Name: _____

Inspector Title: _____ Qualifications/Certifications: _____

Storm Events of the Last 7 Days

Storm Event Date	Storm Event Time	Storm Event Duration	Total Rainfall Amount	Discharge Occur? (Y/N)
_____	_____	_____	_____(inches)	_____
_____	_____	_____	_____(inches)	_____
_____	_____	_____	_____(inches)	_____
_____	_____	_____	_____(inches)	_____

Weather Information at the Time of Inspection

Temperature _____ Climate (Sunny, Cloudy, Rain)? _____ Is Storm Water Being Discharged? _____

Sketch or Small Site Map

Along with a narrative inspection log, Ohio EPA recommends the inspector use a sketch or a reduced photocopy of the site plan showing the location of storm water outfalls and storm drain inlets as well as the location and types of control measures. Problems observed at these locations, or at other locations on the construction site, should be highlighted and any corrective measures undertaken should be drawn in and noted in detail on the front side of the sketch. This method will also be helpful as the permittee is required to update the SWP3 to reflect current site conditions.

CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	☐	☐
2. Is the stone 2-inch diameter?	☐	☐
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	☐	☐
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	☐	☐
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

SEDIMENT PONDS

Key things to look for ...

		Yes	No
1.	Are concentrated flows of runoff directed to a sediment pond?	☐	☐
2.	Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	☐	☐
3.	Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	☐	☐
4.	Is the sediment pond dewatering zone appropriately sized (67 cubic yards per acre of total drainage area)?	☐	☐
5.	Is the sediment pond sediment settling zone appropriately sized (34 cubic yards per acre of disturbed area)?	☐	☐
6.	Is the sediment basin designed to be dewatered at the surface through the use of a skimmer or another similar surface water dewatering device?	☐	☐
7.	Is the sediment basin designed so that the dewatering zone will drain in no less time than 48 hours?	☐	☐
8.	Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	☐	☐
9.	For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	☐	☐
10.	For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	☐	☐
11.	Is the length-to-width ratio between inlet(s) and outlet at least 2:1? **NOTE**: If not, a baffle should be added to lengthen the distance.	☐	☐
12.	Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	☐	☐
13.	For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	☐	☐
14.	Was the basin installed prior to grading the site?	☐	☐
15.	Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed from the sediment settling zone once it's half-full. Stabilize the dredged sediments with seed and mulch.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

SEDIMENT BARRIERS

Key things to look for ...

	Yes	No
1. Is the silt fence at least 4" to 6" into the ground?	☐	☐
2. Is the silt fence trench backfilled to prevent runoff from cutting underneath the fence?	☐	☐
3. Is the silt fence pulled tight so it won't sag when water builds up behind it?	☐	☐
4. Are the ends brought upslope of the rest of the silt fence so as to prevent runoff from going around the ends?	☐	☐
5. Is the silt fence placed on a level contour? If not, the fence will only act as a diversion.	☐	☐
6. Have all the gaps and tears in the silt fence been eliminated.	☐	☐
7. Is the sediment barrier controlling an appropriate drainage area? Refer to Chapter 6 of ***Rainwater*** manual. **RULE OF THUMB**: Design capacity for 100 linear feet of sediment barrier is 0.5 acres for slopes < 2%, 0.25 acres for slopes 2% to 20%, & 0.125 acres for slopes 20% or more. Generally, no more than 0.25 acres should lie behind 100 feet of sediment barrier at 2% to 20% slope, i.e., the distance between the barrier and the top of the slope behind it should be no more than 125 feet. The allowable distance increases on flatter slopes and decreases for steeper slopes. **All non-silt fence sediment barriers must be at least 12-inches in diameter.**	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

INLET PROTECTION

Key things to look for ...

	Yes	No
1. Does water pond around the inlet when it rains?	☐	☐
2. Has the fabric been replaced when it develops tears or sags?	☐	☐
3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?	☐	☐
4. For yard inlet protection, does the structure encircle the entire grate?	☐	☐
5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?	☐	☐
6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales.	☐	☐
7. Is sediment that has accumulated around the inlet removed on a regular basis?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 14 days?	☐	☐
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	☐	☐
3. Have disturbed areas outside the silt fence been seeded or mulched?	☐	☐
4. Have soil stockpiles that will sit for over 14 days been stabilized?	☐	☐
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	☐	☐
6. Has seed or mulch blown away? If so, repair.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

PERMANENT STABILIZATION

Key things to look for ...

	Yes	No
1. Are any areas at final grade?	☐	☐
2. Has the soil been properly prepared to accept permanent seeding?	☐	☐
3. Has seed and mulch been applied at the appropriate rate (see Chapter 7 of the ***Rainwater*** manual)?	☐	☐
4. If rainfall has been inadequate, are seeded areas being watered?	☐	☐
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	☐	☐
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? **NOTE**: Rock check dams may be needed to slow the flow of runoff.	☐	☐
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	☐	☐
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

NON-SEDIMENT POLLUTION CONTROL

Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	☐	☐
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	☐	☐
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	☐	☐
4. Are streets swept as often as necessary to keep them clean and free from sediment? NOTE: Sediment should be swept back onto the lot - not down the storm sewers.	☐	☐
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	☐	☐
6. Have stream crossings been constructed entirely of non-erodible material?	☐	☐
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? **NOTE**: if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	☐	☐

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

Appendix I

Construction Inspection Program Escalation Plan

City of Wyoming
Construction Site Erosion and Sediment Control
Escalation Plan

Construction site erosion and sediment control inspection and reporting procedures:

1. Conduct erosion and sediment control inspections on a minimum monthly basis.
2. Prepare a report identifying the Best Management Practice (BMP) installation and maintenance needs per the City's approved Storm Water Pollution Prevention Plan (SWP3).
3. Submit a copy of the report to the project contact and indicate a timeframe when the required action items are to be addressed.
4. Conduct the next inspection within 14-days to ensure the require actions items as identified within the previous report were properly addressed.
5. If properly addressed, document the corrective actions.
6. If not properly addressed, prepare and submit a Notice of Violation (NOV) letter seeking voluntary compliance within 30-days.
7. Conduct a follow-up NOV inspection after the 30-day period.
8. If properly addressed, document the corrective actions.
9. If not properly addressed, prepared and provide a second NOV letter seeking voluntary compliance within 15-days.
10. Conduct a follow-up NOV inspection after the 15-day period.
11. If properly addressed, document the corrective actions.
12. If not properly addressed, seek enforcement per the City of Wyoming Earthwork Regulations.
    a. Enforcement capabilities consist of the following:
        i. Issuance of a Stop Work Order
        ii. Revoke the performance bond
13. On an annual basis, track the following and include within the annual SWMP report submitted to the Ohio EPA by April 1st of each year:
    a. Number of sites requiring erosion and sediment control inspections
    b. Number of inspections conducted
    c. Number of NOV letters submitted
    d. Number of enforcement cases

Notice of Violation Letter Template

[Click **here** and type date]

[Click **here** and type Name]
[Click **here** and type Company Name]
[Click **here** and type Address]
[Click **here** and type Address]

Re: **[Click here and type Project Name]**
Construction Runoff Stormwater Management Notice of Violation
Immediate Action Required

Dear [Click **here** and type Name]:

Pursuant to the City of Wyoming Storm Water District Earthwork Regulations,
[Click **here** and type Company Name] is hereby issued a Notice of Violation (NOV) for the illicit discharge of construction site discharges into the City's Municipal Separate Storm Sewer System (MS4).

[Click **here** and type Company Name] is required to properly implement and maintain the erosion and sediment controls as specified on the City approved Storm Water Pollution Prevention plan and must take immediate and on-going measures to properly manage the construction site runoff.

On[Click here and type Date] , [Click here and type City Staff Name] observed and photographed improperly managed construction site stormwater runoff into the City' MS4.

[Click here and type the NOV Description]

Please be advised that failure to comply with the requirements of this NOV will result in the City pursuing enforcement per the Earthwork Regulations.

You are required to submit a response letter to the City identifying actions that will be implemented, along with corresponding dates, to properly address the noted violations. Violations are to be properly addressed within 30-days.

Response letter submittal address:
City of Wyoming
XXXX
Attention: XXXX
XXXX
XXXX
XXXX

If you should have questions regarding this NOV notification, Please contact me at (513) XXX-XXXX. The City will provide a follow-up inspection to ensure that the noted stormwater management violations have been properly addressed.

Sincerely,

XXXX
XXXX
XXXX

CC:

Appendix J

Stream Corridor Regulations

RULES AND REGULATIONS
OF THE
CITY OF WYOMING STORM WATER DISTRICT
WYOMING, OHIO

ARTICLE IV

STREAM CORRIDOR REGULATIONS

TABLE OF CONTENTS

401 PURPOSE, SCOPE, AND APPLICABILITY

A. The purpose of these Stream Corridor Regulations is to promote and maintain the health, safety, and welfare of the citizens of the City of Wyoming by establishing standards for storm water best management practices (BMPs) that minimize the degradation of the water resources of the City of Wyoming by:

1. Reducing the discharge of pollutants in storm water from development projects to the maximum extent practicable,

2. Protecting water quality, and

3. Satisfying the appropriate water quality requirements of the Clean Water Act, Ohio Law, and the Ohio Revised Code (ORC), including Section 6111.

B. These Stream Corridor Regulations are adopted under authority of Ohio Law and the Ohio Revised Code, including Chapters 307 and 6117, and implement the requirements of the latest discharge permit issued by Ohio EPA to the City of Wyoming under the Phase II Program.

C. These Stream Corridor Regulations are intended to benefit the City of Wyoming by minimizing encroachment on stream channels, reducing the need for costly engineering solutions such as dams and riprap for protecting facilities and reducing property damage and threats to the safety of watershed residents. These Stream Corridor Regulations are also intended to contribute to the scenic beauty and to the environment of the City of Wyoming, the quality of life of the residents of the City of Wyoming, and the corresponding property values. Stream corridor protection zones are intended to provide the following specific benefits:

1. Provide areas for natural meandering and lateral movement of stream channels in the interest of public safety, and minimize flooding and property damage.

2. Maintain natural stream flow characteristics that absorb peak flows, slow the velocity of floodwaters and regulate base flow.

3. Naturally stabilize streams to reduce erosion and downstream transport of eroded sediments, and to minimize the need for structural stabilization measures that contribute to aquatic habitat degradation.

4. Reduce pollutants in runoff flowing through them and in streams during periods of high flows by filtering, settling and transforming pollutants already present in streams.

5. Reduce the presence of aquatic nuisance species to maintain diverse and connected stream corridor vegetation.

6. Provide high quality stream habitats with shade and food to a wide array of wildlife by maintaining diverse and connected stream corridor

vegetation.

D. The City of Wyoming shall designate the ***Enforcing Official*** for purposes of enforcing these Stream Corridor Regulations.

E. These Stream Corridor Regulations shall apply to all lands within the jurisdiction of the City of Wyoming according to the following criteria:

1. The land lies within a Stream Corridor Protection Zone, as defined in Section 407 ESTABLISHMENT OF A STREAM CORRIDOR PROTECTION ZONE of these Stream Corridor Regulations and further defined based upon any Special Exceptions granted under Section 414 SPECIAL EXCEPTIONS of these Stream Corridor Regulations and/or Appeal under Section 416 DISPUTED DETERMINATIONS AND APPEALS of these Stream Corridor Regulations;

2. The land lies within a property where Earthwork disturbing one (1) acre of land or more within a single development or redevelopment project or within a common plan of development has been conducted since the time of passage of these Stream Corridor Regulations;

3. Any Earthwork within the Stream Corridor Protection Zone must minimize alterations of the stream and control expansion of Facilities and Activities, as defined in Table 405-A of these Stream Corridor Regulations ("Facilities and Activities"), present within the Stream Corridor Protection Zone in order to minimize degradation of the water resource caused by stream erosion and sediment deposition.

4. Facilities, Activities, and vegetative conditions within the Stream Corridor Protection Zone at the time of passage of these Stream Corridor Regulations but not allowed under these Stream Corridor Regulations may be continued but shall not be expanded except as set forth in these Stream Corridor Regulations.

402 DEFINITIONS

The words and phrases defined in Article I of the Rules and Regulations of the City of Wyoming shall have the same meaning herein unless otherwise provided.

403 COMPLIANCE WITH OTHER LAWS AND DISCLAIMER OF LIABILITY

A. Compliance with these Stream Corridor Regulations does not relieve the Owner from the duty to comply with any other applicable federal, state or local laws, regulations or ordinances or from responsibility otherwise imposed by law for damage to any person or property.

B. Neither the submission, approval, or disapproval of an Improvement Plan under these Stream Corridor Regulations, nor the Issuance or denial of a Permit, nor the compliance or lack of compliance with these Stream Corridor Regulations, nor any action or lack of action by the ***Enforcing Official*** shall relieve the Owner from responsibility for injury or damage to any person or property otherwise

imposed by law, nor create or impose any liability upon the City of Wyoming, or their respective officers, agents, or employees for injury or damage to any person or property.

C. Approved Maintenance Agreements shall permit Owners of the Stream Corridor Protection Zone to abate any conditions that would be considered to be a nuisance, as defined by state and local rules, regulations, codes and ordinances. When reviewing Improvement Plans and conducting facility inspections, the ***Enforcing Officia***l will address conditions that may contribute to the creation of a nuisance according to pertinent local regulations.

D. Failure of the ***Enforcing Official*** to observe or recognize hazardous or unsightly conditions or to recommend corrective measures shall not relieve the Owner from the responsibility for any resulting condition or damage, or result in any liability on the part of the ***Enforcing Official***, the City of Wyoming, their officers, employees, or agents for any resulting condition or damage.

E. These Stream Corridor Regulations do not create a duty upon the ***Enforcing Official*** or the City of Wyoming to persons impacted by any Stream Corridor establishment, operation, enforcement, or failure to enforce these Stream Corridor Regulations.

404 CONFLICTS AND SEVERABILITY

A. Requirements of federal or state permits issued to the property owner under Section 401 or 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 shall govern when in conflict with the requirements of this regulation. Prior to initiating Earthwork within the Stream Corridor Protection Zone, recipients of such permits shall immediately provide the ***Enforcing Official*** with a copy of any required pre-construction notifications, mitigation plans, certifications, and regulatory correspondence required under such permits.

B. Should any article, section, subsection, clause, or provision of these Stream Corridor Regulations be declared by a court of applicable jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the remainder of these Stream Corridor Regulations, in whole or in part.

C. These Stream Corridor Regulations shall not be construed as authorizing persons to maintain a nuisance on their property, and compliance with the provisions of these Stream Corridor Regulations shall not be a defense in any action to abate such a nuisance, unless otherwise specifically provided herein.

405 PROTECTION OF STREAM CORRIDORS AND IMPROVEMENT PLANS REQUIRED

A. In each case where these Stream Corridor Regulations apply, the Owner shall submit an Improvement Plan addressing the requirements of these Stream Corridor Regulations prior to initiating any Earthwork.

B. Allowable Facilities and Activities within Stream Corridor Protection Zones listed on **Table 405-A** and further defined through approved Improvement Plans,

successful appeals under Section 416 DISPUTED DETERMINATIONS AND APPEALS, or Special Exceptions under Section 414 SPECIAL EXCEPTIONS, shall be identified within Record Plats, easements and/or maintenance agreements associated with the development. No Concept Plan, Improvement Plan, Earthwork Permit, building permit, or zoning approvals shall be issued by the City of Wyoming without full compliance with these Stream Corridor Regulations where applicable.

C. If damaged or destroyed, a Facility existing at the time of passage of these Stream Corridor Regulations or otherwise authorized under these Stream Corridor Regulations may be repaired or restored by the Owner within two years from the date of damage / destruction or the adoption of these Stream Corridor Regulations, whichever is later. Section 413 FACILITY OR ACTIVITY EXPANSION provides requirements for expansion of a Facility within the Stream Corridor Protection Zone existing at the time of passage of these Stream Corridor Regulations.

406 STREAM DELINEATION

A. The Concept Plan and Improvement Plan for the project required under Section 508 of the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming) shall show the location of water resources including surface waters, known springs, wetlands, streams, lakes, and water wells on or within 200 feet of the project site. The Owner shall provide information that supports the delineation of each stream, including the top of each stream bank. Such information may include, but not be limited to, copies from USGS Quad sheets showing streams, photographs, FEMA maps, or soils maps showing the location of streams.

Table 405-A. Allowable Facilities and Activities in the Stream Corridor Protection Zone

Facilities	Allowed? Yes	Allowed? No	Conditions
▪ Facilities pre-existing before regulation	X		Regulation only applies to development/redevelopment
▪ Buildings, structures, and other facilities subject to building permits / zoning approval		X	Unless otherwise allowed by these Regulations
▪ Swimming Pools	X		
▪ Signs and Billboards	X		
▪ Parking lots and paved areas		X	
▪ Roads: o Crossing the stream	X		If impact minimized and stream crossing BMP provided
o Parallel to the stream		X	Unless necessary and approved by ***Enforcing Official***
▪ Paved foot and bike paths	X		Must relocate paths damaged by natural erosion
▪ Levees and dikes	X		If impact to stream corridor minimized
▪ Pipe lines (water, sewer, storm): o Crossing the stream o Parallel to the stream	 X X		 If impact minimized and stream crossing BMP provided If necessary and approved by ***Enforcing Official***
▪ Septic systems	X		If necessary and approved by the Local Heath Department
▪ Storm water quantity/quality control facilities	X		If compatible with habitat function and permitted under floodplain regulations
▪ Fences	X		If impact to corridor, flooding minimized
▪ Public utility transmission lines	X		If necessary and approved by ***Enforcing Official***
▪ Electric, telecommunication, cable TV lines: o Crossing the stream o Parallel to the stream	 X X		 If impact minimized and stream crossing BMP provided If necessary and approved by ***Enforcing Official***
▪ If inconsistent with Earthwork Regulations (Article III of the Rules and Regulations of the City of Wyoming)		X	
Activities			
▪ Clearing of existing vegetation		X	Unless required to support an allowed facility or activity
▪ Vegetation management intended to: o maintain hydraulic function o protect levees / dikes o maintain habitat function o remove damaged / diseased trees o control invasive species o maintain pre-existing vegetation condition (e.g., mowing) o abate nuisance conditions o re-vegetate / re-forest to improve corridor function	 X X X X X X X X		 Per approved maintenance agreement under Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming), Section 516
▪ Debris removal	X		Per approved maintenance agreement
▪ Passive uses including hiking, fishing, picnicking, and similar uses	X		
▪ Soil disturbance by grading, stripping, or other practices		X	Unless required to support an allowed facility or activity
▪ Filling or dumping		X	Unless required to support an allowed facility or activity
▪ Resource restoration activities: o compensatory floodplain storage o stream and/or wetland restoration / enhancement / mitigation	 X X		
▪ Any activity authorized by a Section 401 / 404 permit	X		
▪ Agricultural Activities	X		
▪ Construction activities related to landslide stabilization	X		
▪ Use, storage, or application of pesticides		X	Except for spot spraying of noxious weeds or non-native species consistent with ODNR recommendations
▪ Storage or operation of motorized vehicles		X	Except for approved maintenance and emergency use

B. If the submitted evidence does not clearly support the delineation of water resources required under Section 406(A) of these Stream Corridor Regulations, as determined by the ***Enforcing Official***, then the ***Enforcing Official*** may require a site inspection and input from other sources of information including the U.S. Army Corps of Engineers, Ohio EPA, Ohio Department of Natural Resources, or the Hamilton County Soil and Water Conservation District.

407 ESTABLISHMENT OF A STREAM CORRIDOR PROTECTION ZONE

A. A Stream Corridor Protection Zone consists of all streams with a drainage area greater than 100 acres (unless otherwise defined under these Stream Corridor Regulations) and the area along these streams, defined according to the following criteria:

1. The width of the Stream Corridor Protection Zone shall be based upon the tributary upstream drainage area and be the narrower of the criteria set forth for the Natural Stream Meandering Zone (column 3 of **Table 407-A**) unless one of the following conditions apply:

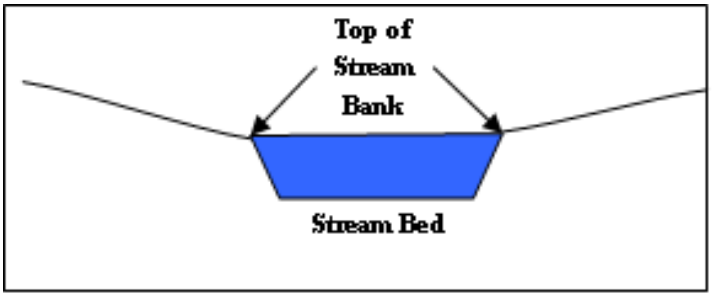
   a. If one or more facilities not allowed according to Table 405-A currently occupies more than 50 percent of the proposed land disturbance area within the Natural Stream Meandering Zone (column 3 of Table 407-A), the Stream Corridor Protection Zone width shall equal column 2 of Table 407-A, or

Table 407-A
Required Stream Corridor Protection Zone Width from the Top of Stream Bank (Figure 407-A) on Each Side of a Stream by Contributing Drainage Area

Contributing Drainage Area (ac) (Column 1)	Stream Bank Stabilization and Pollutant Filtering Zone (Column 2)	Natural Stream Meandering Zone (Column 3)
≤20	10 ft	10 ft
21-50	20 ft	20 ft
51-99	25 ft	25 ft
100-250	25 ft	25 ft
251-500	25 ft	35 ft or 100-year floodway
501-750	25 ft	45 ft or 100-year floodway
751-1200	25 ft	55 ft or 100-year floodway
>1200	50 ft	65 ft or 100-year floodway

Note: 1 square mile = 640 acres

Figure 407-A. Illustration of Top of Stream Bank



b. If the floodway width is less than the Stream Bank Stabilization and Pollutant Filtering Zone (column 2 of Table 407-A), the Stream Corridor Protection Zone width shall equal column 2 (The 100-year floodway may be designated by 1) the Federal Emergency Management Agency (FEMA) or 2) a hydrologic/ hydraulic study accepted by the ***Enforcing Official***).

2. Upon the approval of the Owner, the ***Enforcing Official*** may adjust the location of the Stream Corridor Protection Zone width determined from Table 407-A as necessary to meet the intent of these Stream Corridor Regulations, based upon review of available topographic, flooding, and/or stream meander patterns. Any such adjustment shall not cause the total width of the Stream Corridor Protection Zone on either side of the stream to exceed the width as defined under this Section.

3. If a pre-existing parcel is rendered unbuildable under the requirements of these Stream Corridor Regulations, adjustments may be made to the Stream Corridor Protection Zone so that a primary structure can be located on that parcel.

B. City of Wyoming maps that show the general extent of the Stream Corridor Protection Zone may be used to support the delineation process; however, the maps are not intended to be a substitute for the delineations required under Section 406 STREAM DELINEATION of these Stream Corridor Regulations.

C. The Owner of a property subject to these Stream Corridor Regulations may propose to establish a Stream Corridor Protection Zone within their property to streams with drainage areas smaller than the criteria established in Section 407(A), for the purpose of partially satisfying the requirements of the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming).

408 EXTENSIONS FOR STEEP SLOPES

A. The width of the Stream Corridor Protection Zone shall be extended to include areas where the average slope is greater than 50 percent and the toe of the slope begins at a point within the Stream Corridor Protection Zone. The maximum width of the Stream Corridor Protection Zone slope extension shall be to the top of the slope. The Concept Plan and Improvement Plan for the site shall clearly delineate all areas with slopes steeper than 50 percent within the project site, based on topographic mapping prepared for the project site utilizing a minimum of two-foot contour intervals.

409 EXTENSIONS FOR WETLANDS

A. Where wetlands protected under federal or state law are located partially within the Stream Corridor Protection Zone, the Stream Corridor Protection Zone shall be extended to include the full extent of the wetland area plus any setback from the wetland required by a Section 404 permit. Portions of wetlands permitted to be filled under Section 401 and 404 of the Clean Water Act are excluded from this requirement.

410 DESIGNATION AND PROTECTION OF STREAM CORRIDOR PROTECTION ZONE

A. The Stream Corridor Protection Zone shall be kept in as natural a state as possible so that it can perform its inherent function of erosion protection, flood storage, and water quality protection. The Owner shall take the following actions to provide for the permanent protection of the zone.

1. The Owner shall delineate the Stream Corridor Protection Zone on the Improvement Plan for each property. Such delineation shall graphically include a metes and bounds description defining the border of the zone and must be submitted to the ***Enforcing Official*** for review and approval prior to construction. All Stream Corridor Protection Zones shall be delineated on the Record Plat for the Project.

2. Prior to construction, and throughout the construction process, the Stream Corridor Protection Zone shall be physically delineated using highly visible practices, such as flagging, temporary construction fences, silt fences, or similar devices. Adequate signage shall be provided to indicate that most activities are prohibited beyond that barrier. A list of prohibited actions and activities shall be made readily available at the construction site.

3. The Improvement Plan shall define an appropriate method to permanently delineate the Stream Corridor Protection Zone such that the location of the Zone is apparent and permits access to the Zone.

4. An Inspection and Maintenance Agreement required under Section 516 of the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming) shall also define maintenance responsibilities and methods for the Stream Corridor Protection Zone.

5. Record Plats filed on or after the effective date of these Stream Corridor Regulations shall show the Stream Corridor Protection Zone boundary and state that the most recent version of these Stream Corridor Regulations shall define the allowable Facilities and Activities within the Stream Corridor Protection Zone.

6. The portion of a lot or parcel reserved as the Stream Corridor Protection Zone may be considered as satisfying open space requirements and may be included in the total area for computing the density permitted for that parcel, even if ownership of the Stream Corridor Protection Zone is subsequently transferred. The resulting increase in net density permitted on that portion of the lot or parcel located outside of the Stream Corridor Protection Zone is acceptable to the extent that the gross density for the total area does not exceed the density prescribed in local regulations.

7. Storm water discharges from the site must flow through one or more storm water BMPs designed according to the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming) prior to entering the Stream Corridor Protection Zone, unless it is impractical to drain the portion of the site adjacent to the Stream

Corridor Protection Zone into a common drainage system of the site, (i.e., sheet flow from perimeter areas such as the rear yards of residential lots, for low density development scenarios), or where the Owner can demonstrate that the pollutant removal and stream protection requirements of the Post-Construction Regulations (Article V of the Rules and Regulations of the City of Wyoming), are addressed and met by the Stream Corridor Protection Zone, in the opinion of the ***Enforcing Official***. In this case, sites must be graded in a manner that maximizes sheet flow through the Stream Corridor Protection Zone. Storm water discharges through the Stream Corridor Protection Zone must also comply with the Earthwork Regulations (Article III of the Rules and Regulations of the City of Wyoming), as well as storm water drainage rules and regulations of the City of Wyoming. Pipes or channels discharging storm water from a BMP may pass through the Stream Corridor Protection Zone if adequately stabilized from erosion.

411 ENFORCEMENT

A. It shall be unlawful for any Owner to fail to comply with any of the requirements of these Stream Corridor Regulations or any lawful order issued by the ***Enforcing Official*** pursuant thereto, including the failure to pay any authorized civil penalty lawfully issued hereunder.

B. The ***Enforcing Official*** shall have all such rights and powers in interpreting and enforcing these Stream Corridor Regulations as may be accorded to such officials by law, rule, or regulation.

C. Any person that violates these Stream Corridor Regulations shall be required to restore the Stream Corridor Protection Zone through a reasonable plan consistent with the provisions of Section 412 RESTORATION OF STREAM CORRIDOR PROTECTION ZONE and approved by the ***Enforcing Official***. The provisions of these Stream Corridor Regulations may be enforced through civil or criminal proceedings authorized by applicable laws, rules, or regulations brought by the ***Enforcing Official***.

412 RESTORATION OF STREAM CORRIDOR PROTECTION ZONE

A. All non-conforming Facilities and Activities covered by these Stream Corridor Regulations within a Stream Corridor Protection Zone, except for pre-existing facilities / activities defined under Section 401(E)(4), shall be removed by the Owner and their site restored to a condition consistent with the requirements of these Stream Corridor Regulations.

B. The Owner is encouraged to cooperate with the ***Enforcing Official*** for the removal of pre-existing, non-conforming Facilities and Activities, the repair of severely eroded or unstable stream banks, and/or the provision of compensatory floodplain volume as part the Improvement Plans for a site.

C. A Stream Bank Restoration Plan that incorporates bioengineering techniques shall be submitted as part of the Improvement Plan for a project that includes Earthwork within the Stream Corridor Protection Zone. The means and methods for stream restoration work, including Final Stabilization using non-vegetative and

vegetative materials, shall be shown in the Plan. Stream Bank Restoration Plans shall be designed and constructed based on the bankfull discharge and shall be able to withstand the inundation, stream velocities, and channel stresses associated with the 100-year flood event without structural failure once vegetative cover is established. Guidance and further references for stream bank stabilization and stream corridor restoration techniques are provided in the U.S. Department of Agriculture's publication *Stream Corridor Restoration: Principles, Practices and Processes and Engineering Handbook*.

D. Earthwork within the Stream Corridor Protection Zone as a result of an allowable or non-allowable facility or activity must be mitigated through revegetation/reforestation, with the exception of vegetation removal for floodwall and levee maintenance and inspection.

413 FACILITY OR ACTIVITY EXPANSION

A. A Facility or Activity existing at the time of passage of these Stream Corridor Regulations but prohibited under Table 405-A may be expanded by the Owner through a determination of the ***Enforcing Official,*** subject to compliance with the following provisions, at a minimum:

1. The expansion area must not exceed 25% of the footprint area of the existing facility or use that lies within the Stream Corridor Protection Zone.

2. The expansion must comply with all pertinent local, state and federal regulations, including, but not limited to the following:

    a. Local, state, and Federal FEMA floodplain regulations;

    b. Local storm water quantity / quality control regulations;

    c. Ohio EPA NPDES Permits authorizing storm water discharges associated with construction activity or the most current version thereof;

    d. Section 401 of the Clean Water Act;

    e. Ohio EPA Section 401 Water Quality Certification General Isolated Wetland Permit requirements; and

    f. Section 404 of the Clean Water Act.

3. The expansion must not contribute to increased stream bank erosion in those areas.

4. An additional stream crossing or crossings for a subdivision or open space development is necessary for the health, welfare, and safety of the residents of the subdivision.

414 SPECIAL EXCEPTIONS

A. Any Owner may apply to the ***Enforcing Official*** for a special exception to these regulations for some or all of the Stream Corridor Protection Zone affecting the Owner's property. In reviewing applications for special exceptions, or in hearing appeals concerning special exceptions under this paragraph, the ***Enforcing Official*** and the City Manager shall give due regard to the nature and condition of all adjacent uses, including any adjoining stream and Stream Corridor Protection Zone, and to potential economic development benefits associated with granting the requested special exception application. In authorizing a special exception, the ***Enforcing Official*** and/or the City Manager shall impose requirements and conditions with respect to location, construction, maintenance, and operation that are necessary and appropriate to mitigate the special characteristics of the development in order to make it compatible with the stream and adjacent Stream Corridor Protection Zones. In reviewing an application for a special exception, the ***Enforcing Official*** and/or the City Manager shall use the following standards in rendering a determination:

1. Whether the Owner has demonstrated that the size, character, scale, and intensity of the proposed special exception are compatible with the stream, adjacent Stream Corridor Protection Zones, and adjacent existing uses;

2. Whether the Owner has demonstrated that the authorizing of such special exception will not be of substantial detriment to the stream, the adjacent Stream Corridor Protection Zone, or the general vicinity in which it is located;

3. Whether the proposed special exception will maintain the general welfare of the community and is consistent with the community's economic development goals for the area;

4. The extent to which the requested change diminishes the hydraulic and habitat functions of the Stream Corridor Protection Zone. This determination shall be based on sufficient technical and scientific evidence as provided by the Owner and the agencies listed in this section;

5. The extent to which the existing Facilities and Activities preserve the native soil type and natural vegetation of the parcel as well as the percentage of the parcel that is in the 100-year floodway;

6. Whether the property will yield a reasonable return without the special exemption or whether there can be beneficial use of the property;

7. Whether the special exemption is substantial;

8. Whether the essential character of the neighborhood would be substantially altered or whether adjoining properties would suffer a substantial detriment as a result of the special exemption;

9. Whether the Owner's situation or circumstances can feasibly and

economically be obviated through some method other than special exemption; and

10. Whether the spirit and the intent behind the resolutions, ordinances, regulations, measures and orders would be observed and substantial justice done by granting the special exemption.

B. No single factor listed above shall control, and not all factors shall be applicable in each case. Each case shall be determined on its own facts.

C. The designated ***Enforcing Official*** and/or the City Manager may impose such conditions and restrictions upon the property benefitted by a special exemption as the ***Enforcing Official*** and/or the City Manager deem necessary and appropriate to comply with the standards set forth in this provision, to reduce or minimize the impact of such special exemption upon other property in the neighborhood and to further the purpose and intent of these Stream Corridor Regulations.

415 INSPECTION OF STREAM CORRIDOR PROTECTION ZONE

A. The Stream Corridor Protection Zone shall be inspected by the ***Enforcing Official*** whenever appropriate and necessary, and at least upon the occurrence of the following:

1. When a Concept Plan, Improvement Plan, preliminary Record Plat or other land development plan is submitted.

2. When a building or zoning permit is requested.

3. Prior to any Earthwork, to inspect the delineation of the Stream Corridor Protection Zone as required under these Stream Corridor Regulations.

B. The Stream Corridor Protection Zone may also be inspected as deemed necessary by the ***Enforcing Official*** or an approved monitoring entity for compliance with any approvals under these regulations or at any time evidence is brought to the attention of the ***Enforcing Official*** that uses or facilities are occurring that may reasonably be expected to violate the provisions of these regulations.

416 DISPUTED DETERMINATIONS AND APPEALS

A. An Owner wishing to dispute 1) an established Stream Corridor Protection Zone boundary on the Owner's property; 2) the identification of a stream and its stream bank(s) on the Owner's property, 3) the application or expansion of prohibited Facilities and Activities within the Stream Corridor Protection Zone on the Owner's property; or 4) a determination of the ***Enforcing Official*** under these Stream Corridor Regulations which adversely affects the Owner; shall provide to the ***Enforcing Official*** a written statement of the Owner's position concerning the dispute, together with credible written supporting information and documentation evidencing the Owner's position.

B. The Owner may be required to provide such additional information as the

Enforcing Official may reasonably deem appropriate in order to make a proper determination of the disputed issues. The ***Enforcing Official*** shall evaluate the submitted materials, together with such other items or information which the ***Enforcing Official*** may deem relevant to the inquiry, and make a written determination of the disputed issues within thirty (30) days from the date of submission by the Owner of all information and materials requested of the ***Enforcing Official***. A copy of the written determination of the ***Enforcing Official*** shall be provided to the Owner promptly after its issuance.

C. An Owner wishing to appeal a determination made by the ***Enforcing Official*** under Sections 415(A) and 415(B) shall submit a written appeal setting forth the basis of the appeal and why the determination of the ***Enforcing Official*** is erroneous together with a copy of the determination of the ***Enforcing Official*** appealed from, and any relevant supporting materials and documentation required to evidence the Owner's position. The appeal shall be submitted to the City Manager to hear appeals under these Stream Corridor Regulations not later than fifteen (15) calendar days after receipt of the written determination of the ***Enforcing Official,*** or seventeen (17) calendar days from the mailing of a copy of the written determination by the ***Enforcing Official***, whichever is sooner. The Owner shall provide a copy of the written appeal to the ***Enforcing Official*** at the time the Appeal is filed with the Appeals Board.

D. The City Manager shall decide such appeal at a meeting to be held within sixty (60) days from the time the appeal is received by the Appeals Board. In any appeals hearing conducted under this provision, an Owner contesting a determination by the ***Enforcing Official*** shall provide sufficient credible evidence to the City Manager to support a finding that the determination of the Enforcing Official was erroneous. In making any determinations or decisions under these provisions, the ***Enforcing Official*** and the City Manager shall consult with the local zoning official to determine if other setbacks required of the property may be altered to minimize encroachment into the Stream Corridor Protection Zone.

E. In interpreting these Stream Corridor Regulations or deciding any appeals based on these Stream Corridor Regulations, the ***Enforcing Official*** and the City Manager may consult with representatives from the Ohio Department of Natural Resources, Division of Natural Areas; the Ohio Environmental Protection Agency, Division of Surface Water; the Hamilton County Engineer; the Department of Environmental Services of Hamilton County; the Hamilton County General Health District; or other technical experts as necessary to consider appeals.

F. In reviewing any requests for changes in Facilities, Activities, or Boundaries, or in reviewing any disputed matters or appeals of disputed matters under these Stream Corridor Regulations, the ***Enforcing Official*** and the City Manager shall consider, among other relevant items, documents, and evidence, the following:

1. The extent to which the requested change diminishes the hydraulic and habitat functions of the Stream Corridor Protection Zone. This determination shall be based on sufficient technical and scientific evidence as provided by the Owner and the agencies listed in this section;

2. The extent to which the existing Facilities and Activities preserve the native soil type and natural vegetation of the parcel as well as the percentage of the parcel that is in the 100-year floodway;

3. The degree of hardship these regulations place on the Owner and the availability of alternatives to the proposed development;

4. Whether the property will yield a reasonable return without the variance or whether there can be beneficial use of the property;

5. Whether the variance is substantial;

6. Whether the essential character of the neighborhood would be substantially altered or whether adjoining properties would suffer a substantial detriment as a result of the variance;

7. Whether the Owner's situation or circumstances can feasibly and economically be obviated through some method other than variance; and

8. Whether the spirit and the intent behind the resolutions, ordinances, regulations, measures and orders would be observed and substantial justice done by granting the variance.

G. No single factor listed above shall control, and not all factors shall be applicable in each case. Each case shall be determined on its own facts.

H. The City Manager may impose such conditions and restrictions upon the property benefitted by a variance as the City Manager may deem necessary to comply with the standards set forth in this section, to reduce or minimize the impact of such variance upon other property in the neighborhood and to further the purpose and intent of these Stream Corridor Regulations.

Appendix K

Post-Construction Stormwater Regulations

RULES AND REGULATIONS
OF THE
CITY OF WYOMING STORM WATER DISTRICT
WYOMING, OHIO

ARTICLE V

POST-CONSTRUCTION STORM WATER QUALITY REGULATIONS

TABLE OF CONTENTS

501 PURPOSE, SCOPE AND APPLICABILITY

A. The purpose of these Post-Construction Storm Water Quality Regulations ("Post-Construction Regulations") is to promote and maintain the health, safety, and welfare of the citizens of the City of Wyoming by establishing standards for storm water best management practices (BMPs) that minimize the degradation of the water resources of the City of Wyoming by

   a. Reducing the discharge of pollutants from the municipal separate storm sewer system (MS4) owned or operated by the City of Wyoming to the maximum extent practicable,

   b. Protecting water quality, and

   c. Satisfying the appropriate water quality requirements of the Clean Water Act, Ohio Law, and the Ohio Revised Code (ORC), including Section 6111.

B. These Post-Construction Regulations require implementation of the following measures during development or redevelopment of property within the City of Wyoming:

   1. Control storm water runoff from property and ensure that all Post-Construction BMPs are properly designed, permitted, constructed, and maintained.

   2. Reduce water quality impacts to receiving water resources that may be caused by new development or redevelopment activities.

   3. Control the quality of storm water runoff, consistent with controls in these Post-Construction Regulations as well as applicable water quantity control regulations, originating from their property so that surface water and ground water are protected and erosion potential is not increased.

   4. Preserve and enhance where practicable natural infiltration and ground water recharge, and maintain subsurface flow that replenishes water resources, except in slippage prone soils***.***

   5. Incorporate storm water controls into conceptual site layout, site planning and design at the earliest possible stage/step in the development process.

   6. Incorporate the use of Post-Construction BMPs that serve multiple purposes including, but not limited to, quantity/flood control, erosion control, and water quality protection.

   7. Design sites to minimize the number of stream crossings and the work area associated with the disturbance.

C. These Post-Construction Regulations are adopted under authority of Ohio Law and the Ohio Revised Code, including Chapters 307 and 6117 and implement the requirements

of the latest discharge permit issued by Ohio EPA to the City of Wyoming under the Phase II Program.

D. The City of Wyoming shall designate the ***Enforcing Official*** for the enforcement of these Post-Construction Regulations.

E. These Post-Construction Regulations apply as follows:

1. These Post-Construction Regulations apply to any property where Earthwork disturbing one (1) acre of land or larger, or to any property where Earthwork disturbing less than one (1) acre but part of a larger common plan of development that will disturb more than one (1) acre of land has been conducted since the time of passage of these Post-Construction Regulations, unless the legislative body of the member municipality or authorized home rule township establishes a smaller applicable area and specific requirements for these areas.

502 DEFINITIONS

The words and phrases defined in Article I of the Rules and Regulations of the City of Wyoming shall have the same meaning herein unless otherwise provided.

503 COMPLIANCE WITH OTHER LAWS AND DISCLAIMER OF LIABILITY

A. Compliance with these Post-Construction Regulations does not relieve the Owner from the duty to comply with any other federal, state or local laws, regulations or ordinances or from responsibility otherwise imposed by law for damage to any person or property

B. Neither the submission, approval, or disapproval of an Improvement Plan under these Post-Construction Regulations; nor the Issuance or denial of a Permit, nor compliance or lack of compliance with these Post-Construction Regulations; nor any action or lack of action by the ***Enforcing Official*** shall relieve the Owner from responsibility for injury or damage to any person or property otherwise imposed by law, nor create or impose any liability upon the City of Wyoming, or their respective officers, agents, or employees for injury or damage to any person or property.

C. Storm water control practices authorized under these Post-Construction Regulations and maintained according to an approved Maintenance Agreement shall not be considered to be a nuisance under these Post-Construction Regulations. The ***Enforcing Official*** will address conditions that may contribute to the creation of a nuisance according to pertinent local regulations when reviewing Improvement Plans and conducting facility inspections.

D. Failure of the ***Enforcing Official*** to observe or recognize hazardous or unsightly conditions or to recommend appropriate corrective measures shall not relieve the Owner from the responsibility for any resulting condition or damage or injury, or result in any

liability on the part of the ***Enforcing Official***, the City of Wyoming, or their officers, employees, or agents for any resulting condition or damage or injury.

E. These Post-Construction Regulations do not create a duty upon the ***Enforcing Official***, or the City of Wyoming to persons adversely impacted by any Post-Construction BMPs required by these Post-Construction Regulations.

504 CONFLICTS AND SEVERABILITY

A. In the event that any of these Post-Construction Regulations may conflict with other applicable provisions of law or ordinance, the most restrictive provisions, as determined by the ***Enforcing Official***, shall prevail where permitted by law.

B. Should any article, section, subsection, clause, or provision of these Post-Construction Regulations be declared by a court of applicable jurisdiction to be unconstitutional or invalid, such decision shall not affect the validity of the remainder of these Post-Construction Regulations, in whole or in part.

505 MANAGEMENT OF STORM WATER AND IMPROVEMENT PLANS REQUIRED

A. Storm water shall be managed in accordance with these Post-Construction Regulations.

B. In each case where these Post-Construction Regulations apply, the Owner shall submit an Improvement Plan addressing the requirements of these Post-Construction Regulations prior to initiating any Earthwork.

C. The Improvement Plans shall describe how storm water will be managed and shall be prepared in accordance with sound engineering and/or conservation practices by a professional experienced in the design and implementation of standard erosion and sediment controls and storm water management practices addressing all phases of construction. The Improvement Plans shall not be implemented until all required approvals are obtained.

D. The Improvement Plans shall also comply with all drainage, flood control, floodplain management, and related storm water quantity control requirements of the City of Wyoming.

E. The ***Enforcing Official*** shall have the authority to administer these Post-Construction Regulations and issue such notices and orders as may be necessary. The ***Enforcing Official*** may consult with the Ohio EPA, Hamilton County Engineer, the Metropolitan Sewer District of Greater Cincinnati, the Hamilton County Soil and Water Conservation District (HCSWD), private engineers, or other technical experts in administering these Post-Construction Regulations.

506 EXEMPTIONS

A. These Post-Construction Regulations do not apply to activities regulated by the Ohio Department of Natural Resources Animal Waste and Agricultural Pollution Abatement Rules, Ohio Administrative Code Chapter 1501:15-5.

B. These Post-Construction Regulations do not apply to linear construction projects, such as pipeline or utility line installation, that do not result in the installation of additional impervious surfaces as determined by the ***Enforcing Official***. Such projects must be designed to minimize the number of stream crossings and the width of disturbance. Linear construction projects must comply with the requirements of the Earthwork Regulations (Article III of the Rules and Regulations of the City of Wyoming).

C. Application and enforcement of the exemptions under Section 506 Exemptions of these Post-Construction Regulations shall be conducted by the ***Enforcing Official***

507 COORDINATION WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND PERMITS

A. Approvals issued in accordance with these Post-Construction Regulations do not relieve the Owner of responsibility for obtaining all other necessary permits and/or approvals from federal, state, and/or local governments and compliance with other legal requirements. If requirements vary, the most restrictive shall prevail. Other permits and requirements may include, but are not limited to, those listed below.

1. Ohio EPA NPDES Permit authorizing storm water discharges associated with construction activity;

2. Section 401 and 404 of the Clean Water Act;

3. Ohio EPA Section 401 Water Quality Certification General Isolated Wetland Permit;

4. Ohio Dam Safety Law Section 1501.21 OAC; and

5. Applicable Flood Plain Regulations.

B. Compliance with other applicable regulations and permits shall be demonstrated (e.g., copies of permits, authorizations, letters of exemption, or submitted applications) before the City of Wyoming will approve an Improvement Plan.

C. The Improvement Plan shall be coordinated with utility providers to allow any necessary adjustment, relocation, addition or other modification to an existing utility, including overburden loading.

508 SUBMITTAL PROCEDURES

A. An Owner wishing shall submit an Improvement Plan to the ***Enforcing Official*** prior to undertaking Earthwork covered by these Post-Construction Regulations and the Earthwork Regulations (Article III of the Rules and Regulations of the City of Wyoming). This Improvement Plan shall describe how storm water will be managed pursuant to these Post-Construction Regulations. No Earthwork shall be undertaken until such Improvement Plan has been reviewed, and approved through the established submittal and review process of the City of Wyoming.

B. Pre-Submittal Meeting: A Pre-Submittal Meeting with the ***Enforcing Official*** may be requested to discuss the proposed project, review requirements, identify unique aspects of the project that must be addressed during the review process, and establish a preliminary review and approval schedule.

C. Concept Plan: The Owner of a project requiring a preliminary Record Plat or equivalent submittal shall submit Improvement Plans that illustrate the proposed storm water management approach concept (Concept Plan), and the applicable fees to the

Enforcing Official. Concept Plans shall show approximate preliminary locations of the proposed parcel boundaries, setbacks, dedicated open space, public roads, water resources, existing topography, on-site and off-site areas vulnerable to erosion and sediment damage, drainage facilities, Post-Construction BMPs, and easements to allow the ***Enforcing Official*** to determine if the site is laid out in a manner that meets the intent of these Post-Construction Regulations and if the proposed Post-Construction BMPs are capable of controlling runoff from the site in compliance with these Post-Construction Regulations. The ***Enforcing Official*** shall review the Concept Plans and provide comments and recommendations for revisions if any.

A Concept Plan is required:

1. For all subdivisions

2. For all non-residential development that will disturb two (2) acres of land or more

For other construction projects, Concept Plans are encouraged to be submitted for review by the ***Enforcing Official*** in advance of submitting an Improvement Plan in order to avoid subsequent delays caused by the submittal of Improvement Plans which do not comply with these Post-Construction Regulations.

D. Improvement Plans: The Improvement Plan submission shall consist of construction drawings and specifications along with such fees as may be required. The Improvement Plans shall meet the requirements of these Post-Construction Regulations and must be approved by the ***Enforcing Official*** prior to approval of an Earthwork Permit and/or before issuance of a building permit by the Building Department. Any revised Improvement Plans shall be submitted to the ***Enforcing Official*** for approval prior to implementing the proposed modification.

E. Consent to Enter Private Property: Submittal of a Concept Plan and/or Improvement Plan shall be deemed to provide consent to the ***Enforcing Official*** to enter a property subject to these Post-Construction Regulations for the purpose of gathering information necessary for review of and comment to a Concept Plan or Improvement Plans.

F. Review and Comment: The ***Enforcing Official*** shall review and comment on any Concept and/or Improvement Plans submitted within a reasonable period of time. The final Improvement Plans submitted may be either approved or disapproved. If the Improvement Plans are disapproved, they shall be returned with comments stating the reasons for disapproval and requirements for revisions if any.

G. Approval Required: Earthwork shall not begin and building permits shall not be issued without approved Improvement Plans consistent with these Post-Construction Regulations.

H. Individual Lot Construction Will Not Proceed: Improvement Plans for individual lots in a subdivision will not be approved and building permits will not be issued unless the larger

common plan of development or sale containing the individual lot is in compliance with these Post-Construction Regulations.

I. Approval Valid for Two (2) Years / Modification of Plans: If Earthwork has not commenced within two years of approval, Improvement Plans must be re-submitted for review and approval in accordance with rules in effect at the time of re-submittal. Modifications to the project require submittal and approval of a revised Improvement Plan before work may proceed.

J. Stopped or Abandoned Earthwork: Earthwork stopped or abandoned for a period of two (2) consecutive years from the date of discontinuation of Earthwork shall cause the approval of the Improvement Plans to expire and become invalid. For site work to continue either the previously approved plans must be submitted if the scope of the Earthwork has not changed***, or*** an updated set of plans will need to be submitted for approval by the ***Enforcing Official.***

509 STORM WATER MANAGEMENT REQUIREMENTS FOR IMPROVEMENT PLANS

A. Storm Water Management: The Improvement Plans shall describe in detail how the quantity and quality of storm water will be managed after construction is complete for discharge from the site and/or into a water resource. The Improvement Plans will illustrate the type, location, and dimensions of structural and non-structural storm water management practices incorporated into the site design to address the requirements of these Post-Construction Regulations, and provide the rationale for their selection. The rationale must identify how these Post-Construction BMPs will be integrated with appropriate drainage and flood control facilities proposed for the site and will not cause flooding of development upstream and downstream of the site, as required under the storm water quantity control regulations of the City of Wyoming. The rationale must demonstrate that these Post-Construction BMPs minimize degradation to the water resource and its floodplain. The Improvement Plans shall also include a maintenance agreement and long-term plan for the storm water management facilities serving the site. Electronic and hard copies of improvement plans shall be submitted in a format acceptable to the ***Enforcing Official***.

B. Preparation by Professional Engineer: The Improvement Plans shall be prepared and sealed by a Professional Engineer and include supporting calculations, plan sheets, and design details. To the extent necessary, as determined by the ***Enforcing Official,*** a site survey shall be performed by a Professional Surveyor to establish boundary lines, measurements, or land surfaces.

C. Storm Water Design Manual: Applicants/developers may refer to Ohio's Rainwater and Land Development Manual for guidance for designing the storm water management system for the site, including a description of acceptable Post-Construction BMPs that meet the criteria of these Post-Construction Regulations***.*** The design manual or procedures may be updated from time to time based on improvements in engineering, science, monitoring, and local maintenance experience.

D. Contents of Improvement Plans: The Improvement Plans shall include the following:

1. Site Location Map: USGS 1:24,000 or equivalent map showing the Project Name, the boundary of the project site, the name and location of major existing roadways, and the name and location of the immediate receiving water resource(s) within 500 feet of the boundary of the project site and the first subsequent named receiving water resource(s).

2. Site description and Information: The following information shall be included in the general notes, project specifications and/or an attached narrative report:

a. The Project Name and the location of the project, including complete site address or Parcel Identification Number, and individual lot addresses if known and applicable.

b. Contact information: Provide the Company name and contact information and the contact names, addresses, phone numbers, facsimile numbers, and e-mail address for the following:

i. The Professional Engineer responsible for the preparation of the Improvement Plans.

ii. The site Owner, and if applicable the agent or designee.

iii. The Earthwork Contractor and all applicable subcontractors, when identified.

c. A description of the nature and type of the construction activity (e.g. residential, shopping mall, etc.).

d. Total area of the site and the area of the site that is expected to be disturbed (i.e. grubbing, clearing, excavation, filling or grading, including off-site borrow areas, excavated material disposal areas and off-site project construction support activities).

e. A calculation of the area-weighted runoff coefficients for each catchment tributary to an Erosion Prevention & Sediment Control (EP&SC) BMP, Post-Construction BMP, storm water conveyance facility, and storm water detention facility under both pre-construction and post construction site conditions.

f. An estimate of the impervious area and percent imperviousness of the site and areas draining to the site at the beginning and at the conclusion of the project.

g. Existing data describing the soils throughout the site, including the soil series, soil association, and hydrologic soil group. Additional geotechnical

data to support the design of the proposed Earthwork and Post-Construction BMPs (e.g. infiltration, extended conveyance, media filtration, or other BMP) whose effectiveness depends upon site-specific data about the porosity, infiltration characteristics, depth to groundwater, depth to bedrock, and any impermeable layers.

h. Existing data, if available, describing the quality of any discharge from the site.

i. A description of prior land uses at the site.

j. 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.

k. The name and/or location of the immediate receiving water resource(s) and the first subsequent named receiving water resource(s) and the aerial extent and description of wetlands or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project.

l. Location and description of any storm water discharges associated with asphalt and concrete plants on or contiguous with the project site and dedicated to the project, and the best management practices to address pollutants in these storm water discharges.

3. Project Site Map(s): One or more site maps of the project shall be created. The map or series of maps shall be drawn at a scale of at least 1-inch equals 50-feet. The site is to be referenced using the State Plane coordinates and shall indicate the datum used. It is preferred that the entire site be shown on a single 24”x36” (architectural D-size drawing) plan sheet to allow a complete view of the site during plan review. Each map shall identify the phase of the project, if applicable, in relation to the overall development plan and include a north arrow, elevation datum and date of preparation. The map or series of maps shall extend 200 feet beyond the project boundary and shall indicate for that area, at a minimum the following:

a. Limits of Earthwork on the site for each phase of the project.

b. Soils types for the entire site, including the location and extent of visibly evident existing excavations or fills, slope instability, erosion and water seepage or wet conditions, unstable or highly erodible soils, or other areas with potentially serious existing or future erosion problems.

c. Existing and proposed two-foot (2') contours, unless site conditions

require more detailed topography to depict site drainage conditions.

d. Drainage patterns and Post-Construction BMPs within, entering, and exiting the site during each phase of the project, including any existing and/or constructed combined and separate storm water drainage conveyance and drainage inlet facilities within the site, beyond the site, and/or within the larger common plan of development if utilized by the project. These maps shall include a delineation of drainage watersheds at the site expected before, during, and after major grading activities as well as the total off-site and on-site size of each drainage watershed in acres, and the pre-construction and post-construction runoff coefficient for each area.

e. Location of existing and proposed utilities including appurtenances, structures and outfalls. The approximate depths of all utilities shall be indicated.

f. Water resource locations including known springs, wetlands, streams, lakes, water wells, and associated Stream Corridor Protection Zones as defined under the Stream Corridor Regulations (Article IV of the Rules and Regulations of the City of Wyoming) and/or other setbacks on or within 200 feet of the site, including the boundaries of wetlands or streams and any first subsequent named receiving water resource(s) intending to be filled or relocated under an approval from the Army Corps of Engineers and/or Ohio EPA.

g. Existing and proposed locations of buildings, roads, parking facilities

h. The location of any in-stream activities including stream crossings.

i. Existing and proposed property boundaries, and individual lot numbers.

j. The location of any existing or proposed easements or other restrictions placed on the use of the property and the responsible party(ies) under such easement or restriction.

k. On-site and off-site areas vulnerable to erosion and sediment damage.

4. Information Regarding Post-Construction BMPs: For each non-structural and structural Post-Construction BMP to be employed on the site, the Improvement Plan shall include the following:

a. Location and size, including maps showing the location of Post-Construction BMPs and other storm water facilities, detailed drawings with dimensions and elevations, and design calculations. Details of Post-Construction BMPs shall be drawn to scale and shall show volumes and sizes of contributing drainage areas.

b. Soil and subsurface conditions, including tests of infiltration rates for native and amended soils underlying each Post-Construction BMP, and borings or equivalent data indicating seasonal high groundwater levels, top of bedrock elevations, and perched groundwater elevations.

c. Specifications for materials used to construct each Post-Construction BMP, including vegetation, amended soil composition, and structural materials.

d. Post-construction BMP operations and maintenance requirements during and after construction.

e. Any supplemental information requested by the ***Enforcing Official***.

5. Other Approvals and Permits:

a. Ohio EPA NPDES Permit Number and other applicable state and federal permit numbers or approvals shall be provided if available, or the status of permit applications shall be provided if final approvals have not been received.

b. The parcel number, address, contact information, and Earthwork Approval shall be provided for any off-site borrow areas and excavated material disposal areas.

6. Inspection and Maintenance Plan: An Inspection and Maintenance Plan (I&M Plan) shall be prepared for the system of Post-Construction BMPs designed and constructed on the property. Such I&M Plans shall include all Post-Construction BMPs and shall address the inspection and maintenance frequency and requirements listed in Section 516 Maintenance And Inspections of these Post-Construction Regulations.

7. Calculations: Calculations shall be provided as part of the Improvement Plans for projected storm water runoff flows, volumes, and timing into and through all Post-Construction BMPs, and the underlying assumptions and hydrologic and hydraulic methods and parameters, under pre- and post-construction land use conditions, for flood control, water resource protection, and water quality, as required in Section 510 Performance Standards of these Post-Construction Regulations. Calculations shall demonstrate compliance with the City of Wyoming storm water quantity management requirements, demonstrate that the runoff from upper watershed areas have been considered in the calculations and indicate that no adverse impacts are conveyed downstream of the proposed project An investigation of immediate downstream conditions as defined by the ***Enforcing Official*** is required to support development of a rationale for Post-Construction BMP selection addressing anticipated impacts on the water resource and floodplain morphology, hydrology, and water quality. If the downstream property

owner(s) refuse to allow access a letter must be submitted by the downstream property owner(s) stating the refusal.

E. Changes in Site Conditions: The ***Enforcing Official*** shall be notified whenever unforeseen site conditions are discovered (e.g., unforeseen water resources such as unknown springs) during the course of construction that affects storm water management.

F. Improvement Plan Updates Required. The approved Improvement Plans shall be modified whenever there is a change in design, construction, operation or maintenance which has a significant effect on the potential for the discharge of pollutants, or if the recommended controls prove to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity. Revised Improvement Plans shall be provided to the ***Enforcing Official*** for review and approval prior to implementing the suggested changes.

510 PERFORMANCE STANDARDS

A. General: All components of the storm water system, including Post-Construction BMPs for storage, treatment and control, and conveyance facilities, shall be designed in accordance with the performance standards of these Post-Construction Regulations as well as with the storm water quantity control and floodplain management regulations of the City of Wyoming. Earthwork BMPs compliant with the Earthwork Regulations (Article III of the Rules and Regulations of the City of Wyoming) must be maintained in good operational condition until Post-Construction BMPs are installed and operational. Improvement Plans shall clearly document through drawings, specifications, narrative, and calculations how the design addresses each applicable performance standard in this section.

1. Direct runoff to a Post-Construction BMP: Runoff from all areas disturbed during construction shall be directed to one or more Post-Construction BMPs designed in accordance with the performance standards in this section.

2. Integrated Practices that Minimize Degradation of Water Resources: The Post-Construction BMPs shall function as an integrated system that controls flooding within, upstream, and downstream of the site, and minimizes to the maximum extent practicable the degradation of the water resources receiving storm water discharges from the site. Integrated practices shall:

    a. Maintain pre-construction hydrology and groundwater recharge on as much of the site as practicable.

    b. Compact soil and install new impervious surfaces only where necessary to support the future land use.

    c. Compensate for increased water quality volumes caused by soil

compaction and new impervious surfaces by reducing storm water peak flows to less than pre-construction levels, as calculated under Section 510 (C)(2) of these Post-Construction Regulations.

3. Post-Construction BMPs designed for final use: Post-Construction BMPs shall be designed to achieve the storm water management objectives of these Post-Construction Regulations, to be compatible with the proposed post-construction use of the site, to protect the public health, safety, and welfare, and to function safely with minimal maintenance.

4. Storm water management for all lots: Areas developed as a subdivision, as defined by the City of Wyoming, shall provide storm water management for the development of all subdivided lots.

5. Post-Construction BMPs in Water Resources: Post-Construction BMPs shall not be constructed in water resources unless all appropriate permits allowing such construction are obtained from the Ohio EPA, the U.S. Army Corps of Engineers, and all other applicable federal, state, and local agencies. In addition, the Post-Construction BMP construction shall be in compliance with the City of Wyoming erosion and sediment control requirements under the Earthwork Regulations (Article III of the Rules and Regulations of the City of Wyoming) and the Stream Corridor Regulations (Article IV of the Rules and Regulations of the City of Wyoming).

6. Freeboard requirements for Post-Construction BMPs: Where applicable, Post-Construction BMPs must provide a minimum of one (1) foot freeboard above the projected peak stage within the Post-Construction BMP facility.

7. Preservation of Existing Natural Drainage and Vegetation: Practices that preserve and/or improve the existing natural drainage or vegetation shall be used to the maximum extent practicable. Such practices may include minimizing site grading and compaction; protecting and/or restoring water resources, riparian areas, and existing vegetation; and prevention of concentrated storm water runoff to and through these areas.

B. Exemption: A site where soil-disturbing activities are conducted may be exempt from the requirements of Section 510 Performance Standards if:

1. The site is part of a larger common plan of development and it is demonstrated to the satisfaction of the ***Enforcing Official*** that the storm water quality management requirements for the site are satisfied by an existing storm water management practice, or

2. If the storm water quality management requirements for the site are provided by practices in a regional or local storm water management plan approved by the ***Enforcing Official***.

C. Criteria Applying to all Post-Construction BMPs:

1. Written documentation shall be provided in the Improvement Plans describing the Post-Construction BMPs that will be installed during construction for the site and the rationale for the selection of each Post-Construction BMP. Practices chosen must be sized to treat the water quality volume (WQv) and to ensure compliance to the maximum extent practicable with Ohio EPA Water Quality Standards (Ohio Administrative Code Chapter 3745-1) and Ohio EPA Construction General Storm Water NPDES discharge permit requirements applicable to the property.

2. The WQv shall be equal to the volume of runoff from a 0.90 inch rainfall event and shall be determined using the following equations:

$$WQ_V = Rv*P*A/12 \quad \text{(Equation 1)}$$

where terms have the following meanings:

WQV= water quality volume in acre-feet
Rv = the volumetric runoff coefficient using equation 2.
P = 0.90 inch precipitation depth
A = area draining into BMP in acres.

$$RV = 0.05 + 0.9i \quad \text{(Equation 2)}$$

where I = fraction of post-construction impervious surface

An additional volume equal to 20 percent of the WQv shall be incorporated into the BMP for sediment storage. Ohio EPA recommends BMPs be designed according to the methodology described in the most current edition of the Rainwater and Land Development manual or in another design manual acceptable for use by the Ohio EPA.

The BMPs listed in Tables 510A and 510B below are considered standard BMPs approved for general use. BMPs shall be designed such that the drain time is long enough to provide treatment but short enough to provide storage for successive rainfall events and avoid the creation of nuisance conditions. The outlet structure for the post construction BMP shall not discharge more than the first half of the WQv in less than one-third of the drain time. The WQv is the volume of storm water runoff that must be detained by a post-construction practice as specified by the most recent edition of the Rainwater and Land Development manual.

Post-construction practices shall be sized to treat 100% of the WQv associated with their contributing drainage area. If there is an existing post-construction BMP that treats runoff from the disturbed area and the BMP meets the post-construction requirements of the Ohio Earthworks permit, no additional post-construction BMP will be required. A regional storm water BMP may be used to

meet the post-construction requirement if: (1) the BMP meets the design requirements for treating the WQv; and (2) a legal agreement is established through which the regional BMP owner or operator agrees to provide this service in the long term. Design information for such facilities such as contributing drainage areas, capacities, elevations, outlet details and drain times shall be included in the SWP3.

Table 510A: Extended Detention Post-Construction Practices with Minimum Drain Times

Extended Detention Practices	Min. Drain Time of WQv
▪ Wet Extended Detention Basin[1,2]	24 hours
▪ Constructed Ext Detention Wetland[1,2]	24 hours
▪ Dry Extended Detention Basin[1,3]	48 hours
▪ Permeable Pavement – Ext Detention[1]	24 hours
▪ Underground Storage – Ext Detention[1,4]	24 hours
▪ Sand & Other Media Filtration – Ext Det.[1,5]	24 hours

Notes:
1. The outlet structure shall not discharge more than the first half of the WQv in less than one-third of the drain time.
2. Provide a permanent pool with a minimum volume equal to the WQv and an extended detention volume above the permanent pool equal to 1.0xWQv.
3. Dry basins must include a forebay and a micropool each sized at a minimum of 0.1xWQv and a protected outlet, or include acceptable pretreatment and a protected outlet.
4. Underground storage must have pretreatment for removal of suspended sediments included in the design and documented in the SWP3. This pretreatment shall concentrate sediment in a location where it can be readily removed. For non-infiltrating, underground extended detention systems, pretreatment shall be 50% effective at capturing total suspended solids according to the testing protocol established in the Ohio EPA's Alternative Post-Construction BMP Testing Protocol.
5. The WQv ponding area shall completely empty between 24 and 72 hours.

Table 510B: Infiltration Post-Construction Practices with Maximum Drain Times

Infiltration Practices	Max. Drain Time of WQv
▪ Bioretention Area/Cell[1,2]	24 hours
▪ Infiltration Basin[,2]	24 hours
▪ Infiltration Trench[3]	48 hours
▪ Permeable Pavement – Infiltration[3]	48 hours
▪ Underground Storage – Infiltration[3,4]	48 hours

Notes:
1. Bioretention soil media shall have a permeability of approximately 1-4 in/hr. Meeting the soil media specifications in the Rainwater and Land Development Manual is considered compliant with this requirements. Bioretention cells must have underdrains unless in-situ conditions allow for the WQv (surface ponding) plus bioretention soil (to a depth of 24 inches) to drain completely within 48 hours.
2. Infiltrating practices with the WQv stored aboveground (bioretention, infiltration basin) shall fully drain the WQv within 24 hours to minimize nuisance effects of standing water and to promote vigorous communities of appropriate vegetation.
3. Subsurface practices designed to fully infiltrate the WQv (infiltration trench, permeable pavement with infiltration, underground storage with infiltration) shall empty within 48 hours to recover storage for subsequent storm events.
4. Underground storage systems with infiltration must have adequate pretreatment of suspended sediments included in the design and documented in the SWP3 in order to minimize clogging of the infiltrating surface. Pretreatment shall concentrate sediment in a location where it can be readily removed. Examples include media filters situated upstream of the storage or other suitable alternative approved by the Ohio EPA. For infiltrating underground systems, pretreatment shall be 80% effective at capturing total suspended solids according to the testing protocol established in the Ohio EPA's Alternative Post-Construction BMP Testing Protocol.

Small Construction Activities: For all construction activities authorized under this permit which result in a disturbance less than 2 acres, a post-construction practice shall be used to treat storm water runoff for pollutants and to reduce adverse impacts on receiving waters. The applicant must provide a justification in the SWP3 why the use of table 510-A and 510B practices are not feasible. The justification must address limiting factors which would prohibit the project going forward should tables 510A and 510B practices be required. Please note that additional practices selected will require approval from the City of Wyoming. The use of green infrastructure BMPs such as runoff reducing practices is also encouraged.

3. Post-Construction BMPs shall not be located where infiltrating groundwater could adversely impact slope stability based upon a geotechnical evaluation satisfying the requirements of Section 311 of the Earthwork Regulations (Article III of the Rules and Regulations of the City of Wyoming).

4. An as-built landscaping plan based on field observation shall be prepared for each vegetated Post-Construction BMP to indicate how vegetation will be used to establish aquatic and/or terrestrial areas.

5. Each Post-Construction BMP shall be designed to facilitate sediment removal, vegetation management, debris control, and other maintenance activities defined in the I&M Plan for the site. The following criteria apply:

    a. The maximum slope for any vehicle access way shall be 10 (H) to 1 (V), unless the I&M Plan approved by the ***Enforcing Official*** demonstrates that a steeper slope is appropriate for the planned maintenance activities.

    b. The access way shall be designed for expected maintenance equipment and shall extend from a public roadway to each location within the Post-Construction BMP designed for sediment accumulation.

    c. Portions of Post-Construction BMPs that are underground shall include a monitoring port to allow inspection without entry. Any lids, covers, or access openings shall be of such size, weight, and other characteristics to allow them to be opened in the manner described in the I&M Plan.

    d. Post-Construction BMPs shall be provided with an emergency drain, where practicable, so that the basin may be emptied if the primary outlet becomes clogged and/or to drain the permanent pool to facilitate maintenance. A gravity drain shall be provided where site conditions allow. Post-Construction BMPs that are not provided with an emergency gravity drain must be able to be pumped in a manner described in the I&M Plan.

    e. To the maximum extent practicable Post-Construction BMPs shall be designed to incorporate provisions for mosquito management.

    f. The ***Enforcing Official*** may require that additional design features be incorporated into the Post-Construction BMP as necessary to assure that the facility is properly maintained and addresses public safety concerns.

6. Each Post-Construction BMP shall be designed to drain toward the outlet and/or permanent pool in order to minimize standing water and saturated soil conditions that impede maintenance of the facility.

D. Integration with Storm Water Quantity Conveyance Design Criteria: All Post-Construction BMPs shall be integrated into the storm water conveyance and detention system for the

site. This system shall be designed according to the storm water quantity control regulations of the City of Wyoming. The Improvement Plans shall describe how the proposed Post-Construction BMPs are designed to meet the requirements of the City of Wyoming for storm water quantity control. The storm water quantity conveyance system shall be designed to address the following criteria for effective integration of the storm water conveyance facilities and Post-Construction BMPs:

1. Conveyance into a Post-Construction BMP: The surface and subsurface storm water quantity conveyance system for the site shall direct storm water less than or equal to the water quality volume into one (1) or more Post-Construction BMPs prior to discharge into any water resource or into municipal owned/operated storm water conveyance systems.

2. Storm Water in Excess of the Water Quality Volume (WQv): Flows in excess of the WQv shall either be diverted around the Post-Construction BMPs or shall safely pass through the Post-Construction BMP without re-suspending the accumulated pollutants to a level that reduces the Post-Construction BMP's average annual pollutant removal capability.

3. Off-site storm water discharges: Off-site storm water runoff that discharges to or across the site shall either be routed around the Post-Construction BMP or, if this is not possible, the Post-Construction BMP shall be sized to treat all off-site incoming flow. Diversion of storm water runoff around a site or Post-Construction BMP shall not contribute to increases in flows, erosion, or water quality problems downstream.

4. Velocity dissipation: Devices shall be placed at discharge locations and along the length of any outfall ditch to provide non-erosive flow velocity from the structure to a water resource according to criteria contained in the Hamilton County Public Works Department Storm Drainage System Rules and Regulations.

5. Floatable Control: The storm water system shall be designed, to the maximum extent practicable, to prevent floating materials that enter storm water as a result of human activity, such as litter, debris, trash, and yard waste, from discharging into receiving waters.

E. Integration with Stream Corridor Protection Zones:

1. Storm water discharges from the site must flow into and through Post-Construction BMPs designed according to these Post-Construction Regulations prior to entering a Stream Corridor Protection Zone delineated according to criteria in the Stream Corridor Regulations (Article IV of the Rules and Regulations of the City of Wyoming).

2. The ***Enforcing Official*** may determine that the Stream Corridor Protection Zone is the only practical Post-Construction BMP for the portion of the site both upslope of and adjacent to the Stream Corridor Protection Zone. In this case,

sites must be graded in a manner that maximizes sheet flow through the Stream Corridor Protection Zone. Storm water discharges through the Stream Corridor Protection Zone must also comply with the Earthwork Regulations (Article III of the Rules and Regulations of the City of Wyoming), and the storm water drainage rules and regulations of the Hamilton County Department of Public Works.

3. Pipes or ditches discharging storm water from a Post-Construction BMP may pass through the Stream Corridor Protection Zone if adequately stabilized from erosion. Sites must be graded in a manner that maximizes sheet flow through any Stream Corridor Protection Zone designated as the Post-Construction BMP for this portion of the site.

F. Alternative Post-Construction BMPs: The ***Enforcing Official*** may approve the use of alternative Post-Construction BMPs if documentation is provided that demonstrates, to the satisfaction of the ***Enforcing Official*** and with prior written approval from Ohio EPA, that these Post-Construction BMPs are equivalent in pollutant removal and runoff flow/volume reduction effectiveness to those listed in Tables 510-A and 510-B of these Post-Construction Regulations. The WQv discharge rates from the alternative practice must be reduced to minimize degradation of the receiving water resource unless there will be negligible hydrological impact to the stream. WQv discharge rates are considered to have a negligible hydrological impact if one (1) of the following four (4) conditions can be demonstrated:

1. The alternative Post-Construction BMP is able to recharge the entire WQv to groundwater.

2. The larger common plan of development or sale will create less than one (1) acre of impervious surface.

3. The project is a redevelopment project within an existing ultra-urban setting (i.e., a downtown area or on a site where 100 percent of the project area is already impervious surface and the storm water discharges directly into a storm sewer system), or.

4. The storm sewer system discharges directly into a large river (fourth order or greater) or to a lake and where the site is less than five (5) percent of the watershed area that is upstream of the site, unless a TMDL identified water quality problems in the receiving surface waters of the State.

G. Storm Water Management on Redevelopment Sites:

1. Sites that have been previously developed where no Post-Construction BMPs were installed are required to provide the following level of control:

   a. A 20 percent net reduction of the site's volumetric runoff coefficient through impervious area reduction with soil restoration or replacing impervious roof with green roof area.

b. Treatment of at least 20 percent of the WQv for the previously developed area using the BMP's identified within Tables 510-A and 510-B.

c. A combination of (a) and (b).

2. Where there is a combination of redeveloped areas and new development, a weighted approach shall be used with the following equation:

$$WQv = P * A * [(Rv_1*0.2) + (Rv_2 – RV_{1)}] / 12 \text{ (Equation 3)}$$

where:

P = 0.90 inches
A = area draining into the BMP in acres
Rv_1 = volumetric runoff coefficient for existing conditions
Rv_2 =volumetric runoff coefficient for proposed conditions

Post construction practices shall be located to treat impervious areas most likely to generate the highest pollutant load, such as parking lots or roadways, rather than areas predicted to be cleaner such as rooftops.

3. The ***Enforcing Official*** may approve one or more of the practical alternatives as detailed in Section 511 Off Site Alternatives And Alternative Actions of these Post-Construction Regulations where conditions prevent impervious area reduction or on-site storm water management for redevelopment projects.

511 OFF SITE ALTERNATIVES AND ALTERNATIVE ACTIONS

A. Off-site alternatives may be considered on a case-by-case basis where none of the Post-Construction BMPs listed in Table 510-A and 510-B of these Post-Construction Regulations are determined to be feasible. The following criteria must be met to accept an off-site alternative Post-Construction BMP:

1. A maintenance agreement is established that satisfies the requirements of Section 516 Maintenance And Inspections.

2. The off-site Post-Construction BMP discharges to the same Hydrologic Unit Code (HUC)-12 watershed unit or a smaller subwatershed as defined by the ***Enforcing Official***.

3. The mitigation ration of the WQv is 1.5 to 1.0 or the WQv at the point of retrofit.

4. Offsite mitigation requests must be approved by the Ohio EPA and approved documentation provided to the City of Wyoming.

5. The off-site Post-Construction BMP meets all applicable requirements of these Post-Construction Regulations.

B. All alternative actions are subject to the approval of the ***Enforcing Official.*** Alternative actions may include, but are not limited to the following:

1. Implementation of off-site Post-Construction BMPs and/or the retrofit of an existing practice to increase quality and quantity control.

2. Stream, floodplain, or wetland restoration.

3. Acquisition or conservation easements on protected open space contributing to storm water control such as wetland complexes.

C. The ***Enforcing Official*** may request that additional measures not required by these Post-Construction Regulations be taken to correct existing degradation of water resources or to minimize future degradation of water resources. The Property Owner and the ***Enforcing Official*** shall mutually determine equitable compensation for these additional measures.

512 ACCESS TO POST-CONSTRUCTION BMPs – LEGAL INSTRUMENT REQUIRED

A. Access to and entrance into Post-Construction BMPs as required by the ***Enforcing Official*** for inspections and maintenance shall be secured by a recordable real property Legal Instrument (Post-Construction Inspection and Maintenance Agreement) recorded as part of the legal chain of title of the property. The following conditions shall apply to such instrument:

1. The proposed instrument in final form shall be included in the I&M Plan submitted with the proposed Improvement Plans and shall include the parcel identification number for the property and any parcel contributing storm water to and/or required to install the system of Post-Construction BMPs addressed by the Legal Instrument.

2. The instrument shall be approved by the ***Enforcing Official*** prior to approval of a Record Plat and/or Improvement Plan.

3. Unless otherwise allowed by the ***Enforcing Official***, access to Post-Construction BMPs as provided by the instrument shall be from a public right-of-way. The access shall be no less than 15 feet wide. The instrument shall also incorporate the entire Post-Construction BMP plus an additional 15-foot wide band around the perimeter of the Post-Construction BMP.

4. The access to the Post-Construction BMP shall be graded and/or stabilized as necessary to allow maintenance equipment to access and manipulate around and within each facility, as defined in the I&M Plan for the site.

5. Instruments for structural Post-Construction BMPs and access thereto shall include restrictions against the planting of trees, shrubbery, or other woody

growth; against the construction therein of buildings, fences, walls, and other structures that may obstruct the free flow of storm water and the passage of inspectors and maintenance equipment or any other activity or structure that is inconsistent with or interferes with the use, performance or function of the Post-Construction BMP and purpose of the Legal Instrument; and against the changing of final grade from that described by the final grading plan approved by the ***Enforcing Official***. Any re-grading may be performed or obstruction removed by the ***Enforcing Official*** consistent with the Legal Instrument and charged to the appropriate Legal Entity and/or property owners.

513 SITE STABILIZATION REQUIRED PRIOR TO OPERATION OF STORM WATER BMPS

A. No storm water shall be directed through any Post-Construction BMP, if required under Article V of these Regulations, or portions thereof, until the entire area tributary to the Post-Construction BMP has reached final stabilization***.*** Final stabilization occurs after the completion of the final grade at the site, after all of the utilities are installed, and the site is stabilized with vegetation or other appropriate methods. Documentation acceptable to the ***Enforcing Official*** shall be submitted to demonstrate that the site has reached final stabilization. Upon a satisfactorily demonstration, the Post-Construction BMPs or structure(s) may be completed and placed into service. Upon completion of installation of the Post-Construction BMPs or structures, stabilization measures (e.g., seeding and mulching) must be installed on all disturbed areas and/or exposed soils caused by such installation within 7 days, weather permitting.

514 FINAL INSPECTION APPROVAL

A. To receive final inspection and acceptance of any project, or portion thereof, the following must be completed and provided to the ***Enforcing Official***:

1. Final stabilization must be achieved and all Post-Construction BMPs must be installed and made functional per the approved Improvement Plan, as determined by the ***Enforcing Official***.

2. An As-Built Certification, including a Survey where applicable, must be sealed, signed and dated by a Professional Engineer and a Professional Surveyor, respectively. The ***Enforcing Official*** may require the submission of a new set of Post-Construction BMP calculations if he/she determines that the design was altered significantly from the approved Improvement Plans. The As-Built Survey must provide the location, dimensions, and bearing of such practices and include the entity responsible for long-term maintenance as detailed in the I&M Plan.

3. A copy of the complete and recorded I&M Plan as specified in Section 509 Storm Water Management Requirements For Improvement Plans must be provided to the ***Enforcing Official.***

515 OWNERSHIP OF POST-CONSTRUCTION BMPS

A. Unless otherwise required by the ***Enforcing Official***, Post-Construction BMPs shall be owned, controlled, and maintained by a Legal Entity, as follows:

1. If the Post-Construction BMP serves a single property, then the property owner shall be the Legal Entity.

2. If the Post-Construction BMP serves multiple lots in residential, commercial, industrial and/or condominium developments, then the Post-Construction BMP either shall be on a separate lot or located within an easement as specified in these Post-Construction Regulations. The Legal Entity shall be one of the following:

   a. A validly created owners association under Ohio law,

   b. A local unit of government, or

   c. A property owner with a valid contract with the property owners served by the Post-Construction BMP.

516 MAINTENANCE AND INSPECTIONS

A. All Post-Construction BMPs shall be maintained in accordance with the I&M Plan, which is included in the Legal Instrument approved by the ***Enforcing Official*** as provided in Section 512 ACCESS TO POST-CONSTRUCTION Bmps – LEGAL INSTRUMENT REQUIRED of these Post-Construction Regulations. The Legal Entity defined in Section 515 Ownership Of Post-Construction Bmps of these Post-Construction Regulations shall be responsible for maintenance of the Post-Construction BMP(s).

B. If the Post-Construction BMP serves multiple lots in residential, commercial, industrial, and/or condominium developments, then the Legal Entity shall be responsible for the maintenance of all Post-Construction BMPs within the subdivision and/or condominium development.

C. In the event the relationship between the Legal Entity and the property owners is dissolved, or if the Legal Entity fails to perform required maintenance, responsibility for such maintenance shall be proportionally distributed to each property owner contributing storm water to and/or required to install the system of Post-Construction BMPs.

D. The ***Enforcing Official*** shall not authorize any Earthwork covered by these Post-Construction Regulations prior to approving an I&M Plan meeting the requirements of this Section. The I&M Plan shall be submitted for review as part of the Improvement Plans as a Legal Instrument in recordable form, capable of being recorded in the legal chain of title for lands in the County Recorder’s office.

E. A draft of this I&M Plan shall be provided as part of the Improvement Plan submittal. Once a draft is approved, a final copy of the Plan fully executed and in recordable form for the Hamilton County Recorder's Office, must be submitted to the ***Enforcing Official*** to receive final inspection approval of the site.

F. The owners of real property contributing storm water to and/or required to install a system of Post-Construction BMPs required by these Post-Construction Regulations and approved by the ***Enforcing Official*** shall be mutually responsible for the inspection and maintenance of these Post-Construction BMPs as specified in this section and further defined in the I&M Plan unless a public agency or other entity, as approved by the ***Enforcing Official***, assumes the inspection and maintenance responsibility.

G. The I&M Plan shall provide at least the following:

1. The name and contact information for the Legal Entity that owns each Post-Construction BMP and (if known) the Maintenance Provider representing the Legal Entity.

2. The parcel numbers of each property served by the Post-Construction BMP.

3. The parcel number and location of each Post-Construction BMP.

4. The method of funding long-term maintenance and inspections of the system of Post-Construction BMPs.

5. Features of the design that facilitate maintenance of the system of Post-Construction BMPs.

6. A description of the on-going procedures and additional standards, as required by the ***Enforcing Official*** which will ensure continual proper operation and performance of Post-Construction BMPs.

7. An inspection schedule and reporting requirements, including acceptable inspection checklists appropriate for each Post-Construction BMP and proof of inspection certification requirements.

8. A prohibition on alteration of the Post-Construction BMP without prior written approval from the ***Enforcing Official***.

9. The location of and management practices for all instruments established under Section 512 ACCESS TO POST-CONSTRUCTION Bmps – LEGAL INSTRUMENT REQUIRED of these Post-Construction Regulations that provide for access to and work on the system of Post-Construction BMPs.

10. A approvable document indemnifying the ***Enforcing Official*** and related public officials and public entities (the "indemnified officials") from and against any and all losses, costs, claims or liabilities whatsoever, including legal fees and other

defense costs, whether from personal injury, property damages, or other losses of any kind or character asserted or threatened against the indemnified parties, and which are in any way related to the existence, construction, operation, maintenance, or failure of the system of Post-Construction BMPs.

H. Alteration or termination of the I&M Plan is prohibited unless amended or replaced by an equivalent approved plan compliant with these Post-Construction Regulations. Any changes in the I&M Plan must be approved in advance by the ***Enforcing Official*** and recorded in the same manner as the Original I&M Plan prior to becoming effective.. The **Enforcing Official** shall be notified in writing immediately whenever a new Maintenance Provider is designated.

I. The Legal Entity shall either serve as or contract with a Maintenance Provider who shall be responsible for managing any easements established under Section 512 ACCESS TO POST-CONSTRUCTION BMPs – LEGAL INSTRUMENT REQUIRED of these Post-Construction Regulations and for maintaining the system of Post-Construction BMPs. The Maintenance Provider shall maintain the system of Post-Construction BMPs in good working condition acceptable to the ***Enforcing Official*** and in accordance with the schedule of long-term maintenance activities defined in the approved I&M Plan. Adequate maintenance is herein defined as good working condition so that the system of Post-Construction BMPs is performing its design functions.

J. The Maintenance Provider shall submit to the ***Enforcing Official*** an annual inspection report composed of completed inspection checklists and proof of annual inspection by ***Qualified Inspection Personnel***. The purpose of the inspection is to assure safe and proper functioning of the facilities. The inspection shall cover the entire system of Post-Construction BMPs, including berms, inlet structures, outlet structures, pond areas, access roads, etc. Deficiencies shall be noted in the inspection form.

K. Sediment accumulation resulting from the normal operation of the system of Post-Construction BMPs shall be removed and disposed of appropriately. Disposal of accumulated sediments may be onsite in a reserved area(s) for this purpose or off site. Sediment removal activities shall be conducted when 75 percent of the sediment storage volume becomes filled with sediment.

L. The ***Enforcing Official*** bearing proper credentials and identification shall be permitted at all reasonable times to enter upon any property or to gain access to any easements established under Section 512 ACCESS TO POST-CONSTRUCTION BMPs – LEGAL INSTRUMENT REQUIRED as necessary to inspect, observe, maintain, and repair, as required by the enforcement and penalty provisions of these Post-Construction Regulations, the system of Post-Construction BMPs whenever the ***Enforcing Official*** deems necessary. When practical, the ***Enforcing Official*** shall provide written notice to the Legal Entity, property owners and Maintenance Provider prior to entry. The ***Enforcing Official*** shall be granted access without unreasonable delay. Any obstruction preventing safe and easy access to the system of Post-Construction BMPs shall be promptly removed or cleared upon request of the ***Enforcing Official*** and shall not be

replaced or allowed to reoccur. The cost of removing or clearing obstructions shall be the responsibility of the Legal Entity. The ***Enforcing Official*** shall be entitled to examine and copy any records required to be prepared and maintained under these Post-Construction Regulations.

M. The ***Enforcing Official*** may inspect Post-Construction BMPs periodically and determine if maintenance is required according to criteria in the I&M Plan and/or Design Manual. If the ***Enforcing Official*** identifies a maintenance need, the ***Enforcing Official*** will provide written notification to the Legal Entity, as detailed in the I&M Plan. Upon notification, the Legal Entity shall have ***thirty (30) working days***, to make repairs or submit a plan for the approval of the ***Enforcing Official,*** with details regarding the necessary repairs, action items and established timelines.

N. If the Legal Entity and/or designated Maintenance Provider fails to maintain a Post-Construction BMP, the ***Enforcing Official*** may enter the property, perform the required maintenance or remediation, and bill the Legal Entity or Maintenance Provider, or, in the event there is no then currently viable Legal Entity or Maintenance Provider, the property owner(s) contributing storm water to the BMP (the "Responsible Owner(s)") for such costs, together with a 50% additional charge for administrative costs, charges and penalties, where allowed by law. In the event of nonpayment by the Legal Entity, Maintenance Provider, or Responsible Owners, the legislative body of the City of Wyoming or the Enforcing Official may cause the proportional cost of such required maintenance or remediation, together with any administrative costs and charges and allowable penalties to be collected from any and all responsible parties by any means allowable either at law or in equity, including, where authorized by law, the placement of a lien against the properties of the Responsible Owners or the collection of such costs, charges and penalties through the real estate tax duplicate to be paid with the real estate taxes of such benefitted properties.

O. In the event the Post-Construction BMPs as shown on the approved plans and specifications are not maintained in good working order in accordance with the standards of these Post-Construction Regulations and in accordance with the I&M Plan, the City of Wyoming, with due notice, may enter the property and take whatever steps it deems necessary to return the Post-Construction BMPs to good working order. This provision shall not be construed to allow the City of Wyoming to erect any permanent structure on the property. Neither the ***Enforcing Official*** nor the City of Wyoming shall be under any obligation to maintain or repair the system of Post-Construction BMPs and in no event shall these Post-Construction Regulations be construed to impose any such obligations upon those entities.

P. In the event the ***Enforcing Official*** or the City of Wyoming performs any work or expends any funds to return any BMP facilities back to good working order, the Legal Entity and/or the Maintenance Provider shall reimburse the City of Wyoming within thirty (30) days receipt of an invoice from the ***Enforcing Official*** or the City of Wyoming identifying the costs incurred in the repair or remediation plus an additional 50% for administrative costs and charges. If not paid within the prescribed time period, the

Enforcing Official or the City of Wyoming may cause the proportional cost of such required maintenance or remediation together with any administrative costs and charges and allowable penalties to be collected by any means allowable under the law or in equity, including, where authorized by law, the placement of a lien on the benefitted properties contributing storm water, or the collection of such costs, charges and penalties through the real estate tax duplicate of such benefitting Responsible Property owners contributing storm water to and/or required to install and maintain a system of BMPs. Where permitted by law, those charges shall become a lien against the benefitted Responsible Owners property or where authorized by law may be collected through the tax duplicate in the same manner as other taxes. The actions described in this section shall be in addition to and not in lieu of any legal remedies which may otherwise be available to the City of Wyoming or the ***Enforcing Official***.

Q. Except as to the ***Enforcing Official*** and the Indemnified Officials, nothing in these Post-Construction Regulations shall be construed to limit or affect any liability for damage which the Legal Entity, Maintenance Provider or Responsible Owners may have and which is alleged to have resulted from or been caused by storm water runoff where the system of Post-Construction BMPs fails to operate properly.

517 FEES

A. Where applicable, plan review, filing, and inspection fees are required to be submitted to the ***Enforcing Official***.

B. City of Wyoming fees shall be established according to the appropriate provisions of the Wyoming's code and levied according to pertinent administrative procedures of the ***Enforcing Official***.

518 PERFORMANCE SURETY

A. The ***Enforcing Official*** shall require the submittal of a performance bond or surety prior to approval of the Improvement Plan in order to insure that the Post-Construction BMPs are properly installed in accordance with the approved Improvement Plans and these Post-Construction Regulations. The amount of the installation performance surety shall be the total estimated construction cost of the approved Post-Construction BMPs, plus 25%. The performance surety shall conform to the following requirements:

a. A performance contract and bond or surety shall be submitted to the ***Enforcing Official*** or designee. It shall be delivered on a form as outlined in the Design Manual.

b. The surety shall remain in force until the Post-Construction BMPs or related physical improvements have been satisfactorily completed and accepted by the ***Enforcing Official*** or designee. When an "Irrevocable Letter of Credit" is used, it shall contain a clause guaranteeing automatic one year extensions beyond the expiration date thereof, until the work is

completed and accepted. Provisions for a partial pro-rata release of the performance bond based on the completion of various construction stages can be done at the discretion of the ***Enforcing Official***. The installation performance bond shall be released in full within five (5) business days of an acceptable final inspection by the ***Enforcing Official***, approval of acceptable as-built plans, and a written certification by a registered Professional Engineer that the storm water practice has been installed in accordance with the approved plan and other applicable provisions of these Post-Construction Regulations.

519 ENFORCEMENT

A. No person shall violate or cause to be violated any of the provisions of these Post-Construction Regulations, or fail to comply with any lawful order, request or other requirements of any ***Enforcing Official*** or authorized public authority having jurisdiction which is made or issued pursuant to these Post-Construction Regulations, or knowingly use, or cause to be used, lands in violation of these Post-Construction Regulations, or in violation of any order approving or denying an activity or authorization granted under these Post-Construction Regulations. The Enforcing Official shall have the authority to enforce these Post-Construction Regulations, including to the extent authorized by law the power to levy a fine and issue stop work orders (with or without a penalty) where authorized by law or in equity which is reasonably necessary and appropriate when the Enforcing Official determines that a violation of these Post-Construction Regulations has occurred or is occurring.

B. The ***Enforcing Official*** shall have all such rights and powers in interpreting and enforcing these Earthwork Regulations as may be accorded to such officials by law, rule, or regulation.

520 APPEALS

A. Any Owner who believes that there is an error in any order, requirement, decision or determination of the Enforcing Official in relation to these Post-Construction Regulations may file a written appeal with the City Manager not later than fifteen (15) days after the occurrence of the order, requirement, decision or determination. A copy of the appeal shall be served on the Enforcing Official. The appeal shall proceed and be reviewed in accordance with the rules of the relevant appellate body processing the appeal.

521 PENALTIES

A. Any Person who knowingly violates any provision of these Post-Construction Regulations shall be subject to such fines, penalties, or other civil or criminal penalties as may be allowable under applicable law. Each day of violation shall be deemed a separate offense during any continuing period of noncompliance.

B. The imposition of any penalties or the use of other enforcement mechanisms shall not preclude the ***Enforcing Official*** from instituting an action in a Court of proper jurisdiction to prevent an unlawful development, or to restrain, enjoin, correct, or abate a violation, or to require compliance with the provisions of these Post-Construction Regulations or other applicable laws, ordinances, rules, or regulations, or the orders of the ***Enforcing Official*** where authorized by applicable law..

C. A lawfully issued Stop Work Order issued under these Post-Construction Regulations shall remain in effect until (1) all required local, state, and or federal permits are issued, (2) the hazardous condition and/or water quality degradation is remedied to the satisfaction of the ***Enforcing Official***, or (3) the faulty work is remedied and executed in full accordance with the Permit and these Post-Construction Regulations, or for such other period as may be allowed by applicable law, rule or regulation.

Appendix L

Inspection & Maintenance Agreement Template

STORMWATER BEST MANAGEMENT PRACTICES
POST-CONSTRUCTION INSPECTION AND MAINTENANCE AGREEMENT

PROJECT NAME: _____

PROJECT ADDRESS:
_____

This Post-Construction Inspection and Maintenance Agreement ("Agreement") made and entered into this _____day of _____2020, by and between _____(the "Owner") and the City of Wyoming (the "City"), provides as follows:

WHEREAS, the Owner is responsible for certain real estate shown as Address/Tax Map No./Parcel No._____ that is to be developed as _____and referred to as the property;

WHEREAS, the City and the Owner, each for itself and its successors and assigns, agree that the health, safety and welfare of the residents of the City and the protection and maintenance of water quality require the Owner to provide a stormwater management system consisting of the following Best Management Practices:_____ _____ as shown and described within the City approved Stormwater Management Plan pertaining to the Property; and

WHEREAS, to comply with Article V of the Stormwater Rules and Regulations of the City of Wyoming, pertaining to this project, the Owner, for itself and its successors and assigns, has agreed to maintain the stormwater Best Management Practices in accordance with the terms and conditions hereinafter set forth.

NOW, THEREFORE, for and in consideration of the mutual covenants and undertaking of the parties, the parties hereby agree as follows:

INSPECTION AND MAINTENANCE PLAN FOR THE BEST MANAGEMENT PRACTICES

1. The Owner agrees to maintain in perpetuity the Best Management Practices in accordance with the approved Inspection and Maintenance Plan ("Plan") referred to in #2 in a manner that will permit the Best Management Practices to perform the purposes for which they were designed and constructed, and in accordance with the standards by which they were designed and constructed, all as shown and described in the City approved Plan pertaining to the Property. This includes all pipes and channels built to convey stormwater to the Best Management Practices, as well as structures, improvements, and vegetation provided to control the quantity and quality of the stormwater runoff.

2. The Owner shall provide a Plan for all of the Post-Construction Best Management Practices located on the Property as identified within this agreement with the City. The Plan shall contain the following:
    a. Identify the entity responsible for Best Management Practice inspection and maintenance;
    b. The maintenance tasks to be undertaken;
    c. The schedule for the inspection and maintenance;
    d. Any necessary legally binding maintenance easement and agreements;

e. A site plan showing the location of the Best Management Practices and all access and maintenance easements.

3. The Owner shall perform all maintenance in accordance with the Plan and shall complete all repairs identified through regular inspections, and any additional repairs as requested in writing by the City.

BEST MANAGEMENT PRACTICES (BMP's)

1. The Owner shall inspect the BMP's identified within the Plan at least once per year, or more frequently as specified in the City approved Plan.

2. Inspection reports shall be prepared for the BMP's located at the Property and include the following information at a minimum:

   a. Project name and address;
   b. Inspection date;
   c. Indicate the BMP inspected and identify the inspected components;
   d. Summary of inspection results including necessary repairs and maintenance;
   e. BMP pictures taken during the time of the inspection

   The Owner shall retain a copy of the BMP inspection reports and maintenance and repair records and submit copies of the reports to the City by June 1st for each BMP's requiring an annual inspection. If the Best Management Practices are to be inspected more frequently, as specified in the City approved Plan, the Owner shall submit inspection reports based on a schedule prescribed within the Plan.

   Inspection reports to be submitted to:

   Mike Lippert
   Assistant Public Works Director
   City of Wyoming
   800 Oak Avenue
   Wyoming, Ohio 45215

3. The Owner grants permission to the City, its employees and authorized agents, to enter upon the Property and to inspect all aspects of the BMP's whenever the City deems necessary. The City shall provide the Owner copies of the City inspection findings and a directive to commence with necessary repairs.

4. The Owner shall make all repairs within 15 days of their discovery as identified within the Owner inspections or through a request by the City resulting from the City conducted inspections. If repairs will not occur within 15 days, the Owner must receive written approval from the City for an alternative repair schedule.
5. In an event of any default or failure by the Owner in properly maintaining the BMP's in accordance with the approved Storm Water Pollution Prevention Plan and the Post Construction Plan, as determined by the City, or, in the event of an emergency, as determined by the City, it is the sole discretion of the City, after providing reasonable notice to the Owner, to enter the property and take whatever steps necessary to correct deficiencies and to charge the cost of such repairs to the Owner. The Owner shall reimburse the City within 30 days upon demand for costs expended by the City in performing such necessary maintenance or repairs and shall

constitute a lien against the properties of the owner. Nothing herein shall obligate the City to maintain the BMP's.

INDEMNIFICATION

The Owner hereby agrees that it shall save, hold harmless, and indemnify the City and its employees and officers from and against all liability, losses, claims, demands, costs and expenses including legal fees, arising from, or out of, default or failure by the Owner to maintain the BMP's, in accordance with the terms and conditions set forth herein, or from acts of the Owner arising from, or out of, the construction, operation, repair or maintenance of the BMP's.

In the event the City, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Owner shall reimburse the City for all reasonable expenses (direct and indirect) incurred within thirty (30) days of the receipt of invoice from the City. If the Owner fails to reimburse the City within thirty (30) days, the City may certify the charge to the County Auditor so that the charge will be collected at the next tax collection. The County Auditor will place the charge on the tax duplicate of the county, with interest and penalties allowed by law, and it shall be collected as other taxes are collected.

The parties hereto expressly do not intend by execution of this Agreement to create in the public, or any member thereof, any rights as a third party beneficiary or to authorize anyone not a party hereof to maintain a suit for any damages pursuant to the terms of this Agreement.

COVENANT

This Agreement shall be a covenant that runs with the Property and/or equitable servitude and shall be to the benefit of and shall be binding upon the parties hereto, their respective heirs, successors and assigns, and all subsequent owners of the Property, in perpetuity.

The current Owner shall promptly notify the City when the Owner legally transfers any of the Owners responsibilities for the BMP's. The Owner shall supply the City with a copy of any document or transfer, executed by both parties.

Upon execution of the Agreement, it shall be recorded by the Hamilton County Recorder's Office.

AMENDMENT AND TERMINATION

This Agreement may be amended or terminated only by written consent of the Owner or a Transferee and the City.

IN WITNESS WHEREOF, the Owner has caused this Agreement to be signed in its name by a duly authorized person.

_____
Owner Printed Name

_____ _____
Owner Signature Date

_____

City Official Printed Name

_____ _____

City Official Signature Date

BE IT REMEMBERED, that on this _____day of _____, 2020, before me, the subscriber, a Notary Public in and for said County, personally came the above _____, the Owner of Property Parcel No. _____, and acknowledged the signing of the same to be his voluntary act and deed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my official seal, on the day and year last aforesaid.

_____

Notary Public

Appendix M

Post-Construction Inspection Program Escalation Plan

City of Wyoming
Post-Construction Stormwater Program
Escalation Plan

Post-construction water quality Best Management Practice inspection and reporting procedures:

1. On an annual basis, determine the number of projects with post-construction water quality Best Management Practices (BMP's) and Inspection and Maintenance (I&M) plans approved, and I&M agreement established.
2. Update the City's MS4 map and identify the locations of the BMP's.
3. Per the date identified within the I&M agreement, confirm the number of annual inspection reports received from the post-construction operators.
4. Determine projects where annual reports were not received from the post-construction operator.
5. Prepare and submit an inspection reminder to the post-construction operator, reminding them of their report submittal requirement per the established I&M agreement. Provide a date of when the inspection is to occur by and report submittal requirements.
6. Track the report submittals. If a report was not received, the City shall prepare a Notice of Violation (NOV) letter and submit to the post-construction operator. The letter will indicate that the BMP shall be inspected within 30 days and a report submitted to the City.
7. Document reports received by the City.
8. If a report is not received by the timeframe indicated within the NOV letter, the City shall inspect the BMP, and issue a Notice of Violation letter. The post-construction operator is to address the violations within 30-days.
9. The City will conduct a follow-up inspection within 30-days to confirm the violations were properly addressed. If not addressed, the City can seek enforcement procedures per the City of Wyoming Storm Water District Post-Construction Storm Water Quality Regulations.
10. On an annual basis, track the following and include within the annual SWMP report submitted to the Ohio EPA by April 1st of each year:
    a. Number of sites requiring post-construction water quality BMP's
    b. Updates to the MS4 map – BMP location identification
    c. Number of I&M plans approved and agreements established
    d. Number of annual inspection reports received
    e. Number of inspection reminder letters submitted
    f. Number of enforcement cases

Notice of Violation Letter Template

[Click **here** and type date]

[Click **here** and type Name]
[Click **here** and type Title]
[Click **here** and type Company Name]
[Click **here** and type Address]
[Click **here** and type Address]

Re: [Click here and type Project Name] – Water Quality Best Management Practice Maintenance Requirement

Dear [Click **here** and type Name]:

As part of the overall facility/site engineering plan submittal to the City of Wyoming and the review and process approval process, an Inspection and Maintenance (I&M) Plan was approved. The I&M plan identified the post-construction water quality Best Management Practices (BMPs) constructed as part of the overall facility/site improvements. These BMPs provide post-construction stormwater runoff water quality treatment. To ensure that the BMPs are properly functioning, they are required to be routinely inspected and maintained. BMP inspection and maintenance procedures are identified within the I&M plan.

As part of the I&M plan approval process, an Inspection and Maintenance Agreement was established with the City of Wyoming and recorded at the Hamilton County Recorder's Office. Pursuant with the agreement, the owner accordingly shall undertake any routine and/or non-routine inspection and maintenance tasks set forth in the I&M Plan in accordance with the schedule set forth in the I&M Plan.

The BMP associated with your facility consists of a XXXXX. On XXXX, the City conducted an annual inspection of the BMP. It was determined that the BMP is in need of the following maintenance needs:

- XXXXXXXXXX
- XXXXXXXXXX

A copy of the BMP inspection report is attached for your reference.

Per the City's Storm Water District Post-Construction Storm Water Quality Regulations, the Owner shall make necessary repairs within 30-days of their discovery upon request from the City of Wyoming resulting from conducted inspections.

You are required to submit a response letter to the City within 10 days of receipt of this letter identifying actions that will be implemented, along with corresponding dates, to properly address the noted maintenance needs.

Response letter submittal address:

City of Wyoming
XXXX
XXXX
XXXX
XXXX

Please be advised that failure to comply with the requirements of this notification will result in a violation of the I&M Agreement and City's Storm Water District Post-Construction Storm Water Quality Regulations.

If you should have questions regarding this notification, Please contact me at (513) XXX-XXXX.

Sincerely,

XXXX
XXXX
City of Wyoming

CC: XXXX

Attachments: BMP Inspection Report

Appendix N

SWMP Modification Log

SWMP Modifications

Date	MCM	Modification Description