

LOCAL & STATE CODES GOVERNING STORMWATER RUNOFF AND EROSION & SEDIMENT CONTROL

STATE

Indiana Department of Environmental Management (IDEM)

NPDES Stormwater Construction General Permit:

Rule 5 (327 IAC 15-5) - <https://www.in.gov/idem/stormwater/>

LOCAL

City of Lafayette Storm Water Code Chapter 8.08

https://www.municode.com/library/in/lafayette/codes/municipal_code?nodemd=TIT8STSISTSECH8.08CILASTCO

City of West Lafayette Chapter 116

https://www.westlafayette.in.gov/egov/documents/1585233503_95205.pdf

Tippecanoe County Storm Water Ordinance Chapter 4

<https://www.tippecanoe.in.gov/DocumentCenter/View/13927/2017-Comprehensive-Stormwater-Management-Ordinance?bidId=>

Tippecanoe County Storm Water Technical Standards Manual

<https://www.tippecanoe.in.gov/DocumentCenter/View/774/Technical-Standards-Manual-PDF?bidId=>

Purdue University – follows University policy or Rule 5

Ivy Tech Community College – follows City of Lafayette or Rule 5

Town of Battleground – follows Tippecanoe County or Rule 5

Town of Dayton – follows Tippecanoe County or Rule 5

CITY OF LAFAYETTE ARTICLE IV.

City of Lafayette Ordinance Excerpt – Article IV

- **Article IV. - Stormwater Pollution Prevention for Construction Sites**
- **8.08.400 - Applicability and exemptions.**

The city of Lafayette will require a Stormwater Pollution Prevention Plan (SWPPP), which includes erosion and sediment control measures and materials handling procedures, to be submitted as part of the construction plans and specifications for each project subject to the requirements of this chapter. Any project located within city of Lafayette that includes clearing, grading, excavation, and other land disturbing activities, resulting in the disturbance of one-half acre or more of total land area, is subject to the requirements of this chapter. This includes both new development and re-development. This chapter also applies to disturbances of less than one-half acre of land that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one-half or more acres of land, within the MS4 area. Section 8.08.420 provides guidelines for calculating land disturbance.

The requirements under this chapter do not apply to the following activities:

- A. Agricultural land disturbing activities; or
- B. Forest harvesting activities.

The requirements under this chapter do not apply to the following activities, provided other applicable state permits contain provisions requiring immediate implementation of soil erosion control measures:

- A. Landfills that have been issued a certification of closure under 329 IAC 10.
- B. Coal mining activities permitted under IC 14-34.
- C. Municipal solid waste landfills that are accepting waste pursuant to a permit issued by the Indiana Department of Environmental Management under 329 IAC 10 that contains equivalent stormwater requirements, including the expansion of landfill boundaries and construction of new cells either within or outside the original solid waste permit boundary.

For an individual lot where land disturbance is expected to be one-half acre or more, the individual lot owner must complete their own notice of intent letter, apply for a stormwater permit from the city of Lafayette, and ensure that a sufficient construction and stormwater pollution prevention plan is completed and submitted in accordance with Article VI of this chapter, regardless of whether the individual lot is part of a larger permitted project site.

An individual lot with land disturbance less than ½ acre, located within a larger permitted project site, is considered part of the larger permitted project site, and the

individual lot operator must comply with the terms and conditions of the stormwater permit approved for the larger project site. The stormwater permit application for the larger project site must include detailed erosion and sediment control measures for individual lots. These individual lots are not required to submit their own stormwater permit application, but must obtain a stormwater review approval prior to receiving a building permit. Details of the permitting process are contained in Article VI.

It will be the responsibility of the project site owner to complete a stormwater permit application and ensure that a sufficient construction plan is completed and submitted to the city of Lafayette in accordance with Article VI of this chapter. It will be the responsibility of the project site owner to ensure compliance with this chapter during the construction activity and implementation of the construction plan, until the city of Lafayette receives and approves a notice of termination. However, all persons engaging in construction and land disturbing activities on a permitted project site meeting the applicability requirements must comply with the requirements of this chapter and this code.

(Ord. 2008-03 § 2 (part), 2-4-08; Ord. No. 2011-27, § 6, 12-5-11)

- **8.08.410 - Policy on stormwater pollution prevention.**

Effective stormwater pollution prevention on construction sites is dependent on a combination of preventing movement of soil from its original position (erosion control), intercepting displaced soil prior to entering a waterbody (sediment control), and proper on-site materials handling. The developer must submit to the city of Lafayette, a SWPPP with detailed erosion and sediment control plans as well as a narrative describing materials handling and storage, and construction sequencing. The following principles apply to all land-disturbing activities and should be considered in the preparation of a Stormwater Pollution Prevention Plan within city of Lafayette.

- A. Minimize the potential for soil erosion by designing a development that fits the topography and soils of the site. Deep cuts and fills in areas with steep slopes should be avoided wherever possible, and natural contours should be followed as closely as possible.
- B. Existing natural vegetation should be retained and protected wherever possible. Areas immediately adjacent (within thirty-five (35) feet of top of bank) to watercourses and lakes also should be left undisturbed wherever possible. Unvegetated areas or vegetated areas with less than seventy (70) percent cover that are scheduled or likely to be left inactive for fifteen (15) days or more must be temporarily or permanently stabilized with measures appropriate for the season to reduce erosion potential. Alternative measures to site stabilization may be acceptable if the project site owner or their representative can demonstrate they have implemented and maintained erosion and sediment control measures adequate to prevent sediment discharge from the inactive area.

- C. All activities on a site should be conducted in a logical sequence so that the smallest practical area of land will be exposed for the shortest practical period of time during development.
- D. The length and steepness of designed slopes should be minimized to reduce erosion potential. Drainage channels and swales must be designed and adequately protected so that their final gradients and resultant velocities will not cause erosion in the receiving channel or at the outlet. Methods for determining acceptable velocities are included in the city of Lafayette Stormwater Technical Standards Manual.
- E. Sediment-laden water which otherwise would flow from the project site shall be treated by erosion and sediment control measures appropriate to minimize sedimentation. A stable construction site access shall be provided at all points of construction traffic ingress and egress to the project site.
- F. Appropriate measures shall be implemented to prevent wastes or unused building materials, including, garbage, debris, packaging material, fuels and petroleum products, hazardous materials or wastes, cleaning wastes, wastewater, concrete truck washout, and other substances from being carried from a project site by runoff or wind. Identification of areas where concrete truck washout is permissible must be clearly posted at appropriate areas of the site. Wastes and unused building materials shall be managed and disposed of in accordance with all applicable state statutes and regulations. Proper storage and handling of materials such as fuels or hazardous wastes, and spill prevention and cleanup measures shall be implemented to minimize the potential for pollutants to contaminate surface or ground water or degrade soil quality.
- G. Public or private roadways shall be kept cleared of accumulated sediment that is a result of runoff or tracking. Bulk clearing of accumulated sediment shall not include flushing the area with water. Cleared sediment shall be redistributed or disposed of in a manner that is in accordance with all applicable statutes and regulations.
- H. Collected runoff leaving a project site must be either discharged directly into a well-defined, stable receiving channel, or diffused and released to adjacent property without causing an erosion or pollutant problem to the adjacent property owner.
- I. Natural features, including wetlands, shall be protected from pollutants associated with stormwater runoff.

(Ord. 2008-03 § 2 (part), 2-4-08)

- **8.08.420 - Calculations and design standards and specifications.**

In calculating the total area of land disturbance, for the purposes of determining applicability of this chapter to the project, the following guidelines shall be used:

- A. Off-site construction activities that provide services (for example, road extensions, sewer, water, and other utilities) to a land disturbing project site, must be considered as a part of the total land disturbance calculation for the project site, when the activity is under the control of the project site owner.

- B. Strip developments will be considered as one project site and must comply with this chapter unless the total combined disturbance on all individual lots is less than one-half acre and is not part of a larger common plan of development or sale.
- C. To determine if multi-lot project sites are regulated by this rule, the area of land disturbance shall be calculated by adding the total area of land disturbance for improvements, such as, roads, utilities, or common areas, and the expected total disturbance on each individual lot, as determined by the following:
 - 1. For a single-family residential project site where the lots are one-half acre or more, one-half acre of land disturbance must be used as the expected lot disturbance.
 - 2. For a single-family residential project site where the lots are less than one half acre in size, the total lot must be calculated as being disturbed.
 - 3. To calculate lot disturbance on all other types of projects sites, such as industrial and commercial projects project sites, a minimum of one-half acre of land disturbance must be used as the expected lot disturbance, unless the lots are less than one-half acre in size, in which case the total lot must be calculated as being disturbed.

The calculation methods as well as the type, sizing, and placement of all stormwater pollution prevention measures for construction sites shall meet the design criteria, standards, and specifications outlined in the Indiana Stormwater Quality Manual or the Technical Standards. The methods and procedures included in these two references are in keeping with the above stated policy and meet the requirements of IDEM's Rule 5.

(Ord. 2008-03 § 2 (part), 2-4-08; Ord. No. 2011-27, § 7, 12-5-11)

- **8.08.430 - Inspection, maintenance, record keeping, and reporting.**

Following approval of the stormwater management permit by the city of Lafayette and commencement of construction activities, the City Engineer has the authority to conduct inspections of the site to insure full compliance with the provisions of this article, the Indiana Stormwater Quality Manual, and the terms and conditions of the approved permit.

A self-monitoring program must be implemented by the project site owner to insure the stormwater pollution prevention plan is working effectively. A trained individual as defined in the Technical Standards, shall perform a written evaluation of the project site by the end of the next business day following each measurable storm event. If there are no measurable storm events within a given week, the site should be monitored at least once in that week. Weekly inspections shall continue until the entire site has been stabilized and a notice of termination has been issued. The inspector should look at maintenance of existing stormwater pollution prevention measures, including erosion and sediment control measures, drainage studies, and construction materials storage/containment facilities, to ensure they are functioning properly. The inspector should also identify additional measures, beyond those originally identified in the stormwater pollution prevention plan, necessary to remain in compliance with all applicable statutes and regulations.

The resulting evaluation reports must include the name of the individual performing the evaluation, the date of the evaluation, problems identified at the project site, and details of maintenance, additional measures, and corrective actions recommend and completed. A form for documenting these inspections can be found in Appendix B of the Technical Standard.

The stormwater pollution prevention plan shall serve as a guideline for stormwater quality, but should not be interpreted to be the only basis for implementation of stormwater quality measures for a project site. The project site owner is responsible for implementing, in accordance with this article, all measures necessary to adequately prevent polluted stormwater runoff. Recommendations by the inspector for modified stormwater quality measures should be implemented.

Although self-monitoring reports do not need to be submitted to the city of Lafayette, the city of Lafayette has the right to request complete records of maintenance and monitoring activities involving stormwater pollution prevention measures. All evaluation reports for the project site must be made available to the city of Lafayette, in an organized fashion, within forty-eight (48) hours of a request.

(Ord. 2008-03 § 2 (part), 2-4-08; Ord. No. 2011-27, § 8, 12-5-11)

CITY OF WEST LAFAYETTE ARTICLE IV.

City of West Lafayette Ordinance Excerpt – Article IV

Article IV. Stormwater Pollution Prevention for Construction Sites (Ord. No. 27-11)

Sec. 116.401. Applicability and Exemptions

The City of West Lafayette will require a Stormwater Pollution Prevention Plan (SWPPP), which includes erosion and sediment control measures and materials handling procedures, to be submitted as part of the construction plans and specifications. Any project located within the City of West Lafayette that includes clearing, grading, excavation, and other land disturbing activities, resulting in the disturbance of one-half (0.5) acre or more of total land area, is subject to the requirements of this article. This includes both new development and re-development. This article also applies to disturbances of less than one-half (0.5) acre of land that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one-half (0.5) or more acres of land, within the MS4 area. Section 116.403 of this article provides guidelines for calculating land disturbance.

The requirements under this article do not apply to the following activities:

- agricultural land disturbing activities; or
- forest harvesting activities.

The requirements under this article do not apply to the following activities, provided other applicable state permits contain provisions requiring immediate implementation of soil erosion control measures:

- Landfills that have been issued a certification of closure under 329 IAC 10.
- Coal mining activities permitted under IND. CODE article 14-34.
- Municipal solid waste landfills that are accepting waste pursuant to a permit issued by the Indiana Department of Environmental Management under 329 IAC 10 that contains equivalent stormwater requirements, including the expansion of landfill boundaries and construction of new cells either within or outside the original solid waste permit boundary.

For an individual lot where land disturbance is expected to be one-half (0.5) acre or more, the individual lot owner must complete their own notice of intent letter, apply for a stormwater permit from the City of West Lafayette, and ensure that a sufficient construction and stormwater pollution prevention plan is completed and submitted in accordance with article VI of this code, regardless of whether the individual lot is part of a larger permitted project site.

An individual lot with land disturbance less than one-half (0.5) acre, located within a larger permitted project site, is considered part of the larger permitted project site, and the individual lot operator must comply with the terms and conditions of the stormwater permit approved for the larger project site. The stormwater permit application for the larger project site must include detailed erosion and sediment control measures for individual lots. These individual lots are not required to submit their own stormwater permit application, but must obtain a stormwater review approval prior to receiving a building permit. Details of the permitting process are contained in article VI.

It will be the responsibility of the project site owner to complete a stormwater permit application and ensure that a sufficient construction plan is completed and submitted to the City Engineer in accordance with article VI of this code. It will be the responsibility of the project site owner to ensure compliance with this code during the construction activity and implementation of the construction plan, until the City of West Lafayette receives and approves a Notice of Termination. However, all persons engaging in construction and land disturbing activities on a permitted project site meeting the applicability requirements must comply with the requirements of this article and this code and the approved permit and plan.

Sec. 116.402. Policy on Stormwater Pollution Prevention

Effective stormwater pollution prevention on construction sites is dependent on a combination of preventing movement of soil from its original position (erosion control), intercepting displaced soil prior to entering a waterbody (sediment control), and proper on-site materials handling. The developer must submit to the City of West Lafayette, a Stormwater Pollution Prevention Plan (SWPPP) with detailed erosion and sediment control plans as well as a narrative describing materials handling and storage, and construction sequencing. The following principles apply to all land-disturbing activities and should be considered in the preparation of a SWPPP within the City of West Lafayette.

(a) Minimize the potential for soil erosion by designing a development that fits the topography and soils of the site. Deep cuts and fills in areas with steep slopes should be avoided wherever possible, and natural contours should be followed as closely as possible.

(b) Existing natural vegetation shall be retained and protected wherever possible. Areas immediately adjacent (within 35 feet of top of bank) to watercourses and lakes also should be left undisturbed wherever possible. Unvegetated areas or vegetated areas with less than 70% cover that are scheduled or likely to be left inactive for 15 days or more must be temporarily or permanently stabilized with measures appropriate for the season to reduce erosion potential. Alternative measures to site stabilization may be acceptable if the project site owner or their representative can demonstrate they have implemented and maintained erosion and sediment control measures adequate to prevent sediment discharge from the inactive area.

(c) All activities on a site should be conducted in a logical sequence so that the smallest practical area of land will be exposed for the shortest practical period of time during development.

(d) The length and steepness of designed slopes should be minimized to reduce erosion potential. Drainage channels and swales must be designed and adequately protected so that their final gradients and resultant velocities will not cause erosion in the receiving channel or at the outlet. Methods for determining acceptable velocities are included in the West Lafayette Stormwater Technical Standards.

(e) Sediment-laden water which otherwise would flow from the project site shall be treated by erosion and sediment control measures appropriate to minimize sedimentation. A stable construction site access shall be provided at all points of construction traffic ingress and egress to the project site.

(f) Appropriate measures shall be implemented to prevent wastes or unused building materials, including, garbage, debris, packaging material, fuels and petroleum products, hazardous materials or wastes, cleaning wastes, wastewater, concrete truck washout, and other substances from being carried from a project site by runoff or wind. Identification of areas where concrete truck washout is permissible must be clearly posted at appropriate areas of the site. Wastes and unused building materials shall be managed and disposed of in accordance with all applicable State statutes and regulations. Proper storage and handling of materials such as fuels or hazardous wastes, and spill prevention and cleanup measures shall be implemented to minimize the potential for pollutants to contaminate surface or ground water or degrade soil quality.

(g) Public or private roadways shall be kept cleared of accumulated sediment that is a result of runoff or tracking. Bulk clearing of accumulated sediment shall not include flushing the area with water. Cleared sediment shall be redistributed or disposed of in a manner that is in accordance with all applicable statutes and regulations.

(h) Collected runoff leaving a project site must be either discharged directly into a well-defined, stable receiving channel, or diffused and released to adjacent property without causing an erosion or pollutant problem to the adjacent property owner.

(i) Natural features, including wetlands, shall be protected from pollutants associated with stormwater runoff.

(j) The SWPPP shall designate a paved or stoned area(s) for parking during construction to prevent site disturbance and the permittee shall require all contractors, subcontractors, material suppliers, and deliveries to use only the designated parking area(s).

Sec. 116.403. Calculations, Design Standards and Specifications

In calculating the total area of land disturbance, for the purposes of determining applicability of this article to the project, the following guidelines shall be used:

(a) Off-site construction activities that provide services (for example, road extensions, sewer, water, and other utilities) to a land disturbing project site, must be considered as a part of the total land disturbance calculation for the project site, when the activity is under the control of the project site owner.

(b) Strip developments will be considered as one (1) project site and must comply with this article unless the total combined disturbance on all individual lots is less than one-half (0.5) acre and is not part of a larger common plan of development or sale.

(c) To determine if multi-lot project sites are regulated by this rule, the area of land disturbance shall be calculated by adding the total area of land disturbance for improvements, such as, roads, utilities, or common areas, and the expected total disturbance on each individual lot, as determined by the following:

(1) For a single-family residential project site where the lots are one-half (0.5) acre or more, one-half (0.5) acre of land disturbance must be used as the expected lot disturbance.

(2) For a single-family residential project site where the lots are less than one half (0.5) acre in size, the total lot must be calculated as being disturbed.

(3) To calculate lot disturbance on all other types of projects sites, such as industrial and commercial projects project sites, a minimum of one-half (0.5) acre of land disturbance must be used as the expected lot disturbance, unless the lots are less than one-half (0.5) acre in size, in which case the total lot must be calculated as being disturbed.

The calculation methods as well as the type, sizing, and placement of all stormwater pollution prevention measures for construction sites shall meet the design criteria, standards, and specifications outlined in the Indiana Stormwater Quality Manual or the Technical Standards. The methods and procedures included in these two references are in keeping with the above stated policy and meet the requirements of IDEM's Rule 5.

Sec. 116.404. Inspection, Maintenance, Record Keeping, and Reporting

Following approval of the stormwater management permit by the City of West Lafayette and commencement of construction activities, the City Engineer has the authority to conduct inspections of the site to insure full compliance with the provisions of this article, the Indiana Stormwater Quality Manual, and the terms and conditions of the approved permit.

A self-monitoring program must be implemented by the project site owner to insure the stormwater pollution prevention plan is working effectively. A trained individual, as defined in the Technical Standards, shall perform a written evaluation of the project site by the end of the next business day following each measurable storm event. If there are no measurable storm events within a given week, the site should be monitored at least once in that week. Weekly

inspections shall continue until the entire site has been stabilized and a Notice of Termination has been issued. The inspector should look at the maintenance of existing stormwater pollution prevention measures, including erosion and sediment control measures, drainage structures, and construction materials storage/containment facilities, to ensure they are functioning properly. The inspector shall also identify additional measures, beyond those originally identified in the stormwater pollution prevention plan, necessary to remain in compliance with all applicable statutes and regulations.

The resulting evaluation reports must include the name of the individual performing the evaluation, the date of the evaluation, problems identified at the project site, and details of maintenance, additional measures, and corrective actions recommended and completed. A form for documenting these inspections can be found in Appendix B of the Technical Standard.

The stormwater pollution prevention plan shall serve as a guideline for stormwater quality, but should not be interpreted to be the only basis for implementation of stormwater quality measures for a project site. The project site owner is responsible for implementing, in accordance with this article, all measures necessary to adequately prevent polluted stormwater runoff. Recommendations by the inspector for modified stormwater quality measures should be implemented.

Although self-monitoring reports do not need to be submitted to the City Engineer, the City Engineer has the right to request complete records of maintenance and monitoring activities involving stormwater pollution prevention measures. All evaluation reports for the project site must be made available to the City Engineer, in an organized fashion, within forty-eight (48) hours of a request.

TIPPECANOE COUNTY ARTICLE 4



CHAPTER FOUR

**STORMWATER POLLUTION PREVENTION
FOR CONSTRUCTION SITES**

1. APPLICABILITY AND EXEMPTIONS

The Tippecanoe County Drainage Board will require a Stormwater Pollution Prevention Plan (SWPPP), which includes erosion and sediment control measures and materials handling procedures, to be submitted as part of the construction plans and specifications for each project subject to the requirements of this chapter. Any project located within Tippecanoe County that includes clearing, grading, excavation, and other land disturbing activities, resulting in the disturbance of 1 acre or more of total land area, is subject to the requirements of this chapter. This includes both new development and re-development. This chapter also applies to disturbances of less than one 1 acre of land that are part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) or more acres of land, within the MS4 area. Section 3 of this chapter provides guidelines for calculating land disturbance.

The requirements under this chapter do not apply to the following activities:

- a. agricultural land disturbing activities; or
- b. forest harvesting activities.

The requirements under this chapter do not apply to the following activities, provided other applicable state permits contain provisions requiring immediate implementation of soil erosion control measures:

- a. Landfills that have been issued a certification of closure under 329 IAC 10.
- b. Coal mining activities permitted under IC 14-34.
- c. Municipal solid waste landfills that are accepting waste pursuant to a permit issued by the Indiana Department of Environmental Management under 329 IAC 10 that contains equivalent stormwater requirements, including the expansion of landfill boundaries and construction of new cells either within or outside the original solid waste permit boundary.

For an individual lot where land disturbance is expected to be one (1) acre or more, the individual lot owner must complete their own notice of intent letter, apply for a stormwater permit from the Tippecanoe County Drainage Board, and ensure that a sufficient construction and stormwater pollution prevention plan is completed and submitted in accordance with Chapter 6 of this Ordinance, regardless of whether the individual lot is part of a larger permitted project site.

An individual lot with land disturbance less than one (1) acre, located within a larger permitted project site, is considered part of the larger permitted project site, and the individual lot operator must comply with the terms and conditions of the stormwater permit approved for the larger project site. The stormwater permit application for the larger project site must include detailed erosion and sediment control measures for individual lots. These individual lots are not required to submit their own stormwater permit application, but must obtain a stormwater review approval prior to receiving a building permit. Details of the permitting process are contained in Chapter 6.

It will be the responsibility of the project site owner to complete a stormwater permit application and ensure that a sufficient construction plan is completed and submitted to the Tippecanoe County Drainage Board in accordance with Chapter 6 of this Ordinance. It will be the responsibility

of the project site owner to ensure compliance with this Ordinance during the construction activity and implementation of the construction plan, and to notify the Tippecanoe County Drainage Board with a sufficient notice of termination letter upon completion of the project and stabilization of the site. However, all persons engaging in construction and land disturbing activities on a permitted project site meeting the applicability requirements must comply with the requirements of this chapter and this Ordinance.

2. POLICY ON STORMWATER POLLUTION PREVENTION

Effective stormwater pollution prevention on construction sites is dependent on a combination of preventing movement of soil from its original position (erosion control), intercepting displaced soil prior to entering a waterbody (sediment control), and proper on-site materials handling. The developer must submit to the Tippecanoe County Drainage Board, a SWPPP with detailed erosion and sediment control plans as well as a narrative describing materials handling and storage, and construction sequencing. The following principles apply to all land-disturbing activities and shall be considered in the preparation of a Stormwater Pollution Prevention Plan within Tippecanoe County.

- A. Minimize the potential for soil erosion by designing a development that fits the topography and soils of the site. Deep cuts and fills in areas with steep slopes should be avoided wherever possible, and natural contours should be followed as closely as possible.
- B. Existing natural vegetation shall be retained and protected wherever possible. Areas immediately adjacent (within 35 feet of top of bank) to watercourses and lakes also should be left undisturbed wherever possible. Unvegetated areas or vegetated areas with less than 70% cover that are scheduled or likely to be left inactive for 15 days or more must be temporarily or permanently stabilized with measures appropriate for the season to reduce erosion potential. Alternative measures to site stabilization may be acceptable if the project site owner or their representative can demonstrate they have implemented and maintained erosion and sediment control measures adequate to prevent sediment discharge from the inactive area.
- C. All activities on a site should be conducted in a logical sequence so that the smallest practical area of land will be exposed for the shortest practical period of time during development.
- D. The length and steepness of designed slopes should be minimized to reduce erosion potential. Drainage channels and swales must be designed and adequately protected so that their final gradients and resultant velocities will not cause erosion in the receiving channel or at the outlet. Methods for determining acceptable velocities are included in the Tippecanoe County Stormwater Technical Standards Manual.
- E. Sediment-laden water which otherwise would flow from the project site shall be treated by erosion and sediment control measures appropriate to minimize sedimentation. A stable construction site access shall be provided at all points of construction traffic ingress and egress to the project site.
- F. Appropriate measures shall be implemented to prevent wastes or unused building materials, including, garbage, debris, packaging material, fuels and petroleum products,

hazardous materials or wastes, cleaning wastes, wastewater, concrete truck washout, and other substances from being carried from a project site by runoff or wind. Identification of areas where concrete truck washout is permissible must be clearly posted at appropriate areas of the site. Wastes and unused building materials shall be managed and disposed of in accordance with all applicable State statutes and regulations. Proper storage and handling of materials such as fuels or hazardous wastes, and spill prevention and cleanup measures shall be implemented to minimize the potential for pollutants to contaminate surface or ground water or degrade soil quality.

- G. Public or private roadways shall be kept cleared of accumulated sediment that is a result of runoff or tracking. Bulk clearing of accumulated sediment shall not include flushing the area with water. Cleared sediment shall be redistributed or disposed of in a manner that is in accordance with all applicable statutes and regulations.
- H. Collected runoff leaving a project site must be either discharged directly into a well-defined, stable receiving channel, or diffused and released to adjacent property with out causing an erosion or pollutant problem to the adjacent property owner.
- I. Natural features, including wetlands, shall be protected from pollutants associated with stormwater runoff.

3. CALCULATIONS AND DESIGN STANDARDS AND SPECIFICATIONS

In calculating the total area of land disturbance, for the purposes of determining applicability of this chapter to the project, the following guidelines shall be used:

- A. Off-site construction activities that provide services (for example, road extensions, sewer, water, and other utilities) to a land disturbing project site, must be considered as a part of the total land disturbance calculation for the project site, when the activity is under the control of the project site owner.
- B. Strip developments will be considered as one (1) project site and must comply with this chapter unless the total combined disturbance on all individual lots is less than one (1) acre and is not part of a larger common plan of development or sale.
- C. To determine if multi-lot project sites are regulated by this rule, the area of land disturbance shall be calculated by adding the total area of land disturbance for improvements, such as, roads, utilities, or common areas, and the expected total disturbance on each individual lot, as determined by the following:
 - i. For a single-family residential project site where the lots are one-half (0.5) acre or more, one-half (0.5) acre of land disturbance must be used as the expected lot disturbance.
 - ii. For a single-family residential project site where the lots are less than one half (0.5) acre in size, the total lot must be calculated as being disturbed.
 - iii. To calculate lot disturbance on all other types of projects sites, such as industrial and commercial projects project sites, a minimum of one (1) acre of land disturbance must be used as the expected lot disturbance, unless the lots are less than one (1) acre in size, in which case the total lot must be calculated as being disturbed.

The calculation methods as well as the type, sizing, and placement of all stormwater pollution prevention measures for construction sites shall meet the design criteria, standards, and specifications outlined in the *Indiana Stormwater Quality Manual* or the Technical Standards. The methods and procedures included in these two references are in keeping with the above stated policy and meet the requirements of IDEM's Rule 5.

4. INSPECTION, MAINTENANCE, RECORD KEEPING, AND REPORTING

Following approval of the stormwater management permit by the Tippecanoe County Drainage Board and commencement of construction activities, the Tippecanoe County Drainage Board has the authority to conduct inspections of the site to insure full compliance with the provisions of this chapter, the *Indiana Stormwater Quality Manual*, and the terms and conditions of the approved permit.

A self-monitoring program must be implemented by the project site owner to insure the stormwater pollution prevention plan is working effectively. An inspector, approved by the Tippecanoe County Drainage Board, shall perform a written evaluation of the project site by the end of the next business day following each measurable storm event. If there are no measurable storm events within a given week, the site should be monitored at least once in that week. Weekly inspections shall continue until the entire site has been stabilized and a Notice of Termination has been issued. The inspector shall look at the maintenance of existing stormwater pollution prevention measures, including erosion and sediment control measures, drainage structures, and construction materials storage/containment facilities, to ensure they are functioning properly. The inspector shall also identify additional measures, beyond those originally identified in the stormwater pollution prevention plan, necessary to remain in compliance with all applicable statutes and regulations.

The resulting evaluation reports must include the name of the individual performing the evaluation, the date of the evaluation, problems identified at the project site, and details of maintenance, additional measures, and corrective actions recommended and completed. A form for documenting these inspections can be found in Appendix B of the Technical Standard.

The stormwater pollution prevention plan shall serve as a guideline for stormwater quality, but should not be interpreted to be the only basis for implementation of stormwater quality measures for a project site. The project site owner is responsible for implementing, in accordance with this chapter, all measures necessary to adequately prevent polluted stormwater runoff. Recommendations by the inspector for modified stormwater quality measures should be implemented.

Although self-monitoring reports do not need to be submitted to the Tippecanoe County Drainage Board, the Tippecanoe County Drainage Board has the right to request complete records of maintenance and monitoring activities involving stormwater pollution prevention measures. All evaluation reports for the project site must be made available to the Tippecanoe County Drainage Board, in an organized fashion, within forty-eight (48) hours of a request.