

Storm Sewer System Information

Address:

Project Name:

This checklist is intended as a guide to provide assistance to the project engineer in the design and installation of storm sewer systems in the City of Portage consistent with the Storm Water Design Criteria Manual. The applicant is responsible for being sufficiently familiar with and have a working knowledge of the codes and ordinances of the City of Portage but the Department of Community Development will be glad to assist. A meeting with Department staff is encouraged.

Filing Information

Yes No N/A

- 1. Drainage plan at a scale no less than 1 inch = 100 feet, containing the following:
 - Tributary areas showing boundaries and acreage contributing to each structure (including off-site tributary areas).
 - Existing and proposed drainage courses and structures.
 - On-site and off-site drainage easements.
 - Proper identification and numbering of manholes, catch basins and inlets.
 - Invert and rim elevations for all structures.
 - Pipe length, diameter, slope, material and class.
 - Hydraulic grade line.
 - Note specifying all work shall be completed in accordance with City of Portage Contract Conditions and Specifications (public basins only)
- 2. Storm water strategy
- 3. Drainage calculations for sizing basin system and piping system.
- 4. Soil boring and permeability test results, including groundwater elevations.
- 5. Basin design high water level and normal water level.
- 6. Monitoring well details.
- 7. Outlet Details.
- 8. Landscape plan.
- 9. Maintenance plan, including tasks and schedules.
- 10. Basin fence and access drive details.

Positioning and Design

Yes No N/A

- 1. Storm sewer pipe shall have a minimum diameter of 12 inches.
- 2. The maximum distance between catch basins is 400 feet for pipe less than 42 inches in diameter and 600 feet for larger pipe. Catch basins shall be placed at all low points. At a minimum, double inlets shall be required at low points unless sufficient documentation is provided to show that a single inlet has the capacity for design flows without ponding. No more than 150 feet of street drainage shall be allowed to flow around a corner.
- 3. Catch basins and manholes shall be placed at all changes in pipe direction or pipe size and at all inlets.
- 4. The size and grade of the proposed storm sewer shall be shown on the plans.
- 5. Premium joints (rubber or slip seal) shall be used for solid wall pipe.
- 6. Connections to manholes and catch basins shall be made with a resilient connector.
- 7. Storm water inlet structures (catch basins) shall have a 2-foot sump. All structures without direct storm water inlet shall have no sump and a solid lid.
- 8. No discharge of stormwater is permitted to a wetland, except where a system is constructed and maintained to prevent sediment deposition into the wetland and approved by the MDEQ.
- 9. Abandoned, on-site septic/drywell systems shall not be used as stormwater management structures.
- 10. Storm water leaching basins are not permitted in loading/unloading areas (i.e. truck wells, loading docks).
- 11. Floor drains are prohibited unless they are connected to a sanitary sewer, holding tank or a state groundwater discharge permit has been obtained.
- 12. No storm water may be disposed of off-site or to a public or private street except as approved.