

## 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

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

### Positioning and Design

Yes No N/A

- |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Storm sewer pipe shall have a minimum diameter of 12 inches.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 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. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. Catch basins and manholes shall be placed at all changes in pipe direction or pipe size and at all inlets.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. The size and grade of the proposed storm sewer shall be shown on the plans.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 5. Premium joints (rubber or slip seal) shall be used for solid wall pipe.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 6. Connections to manholes and catch basins shall be made with a resilient connector.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 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.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 8. No discharge of storm water is permitted to a wetland, except where a system is constructed and maintained to prevent sediment deposition into the wetland and approved by the MDNR-E.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 9. Abandoned, on-site septic/drywell systems shall not be used as storm water management structures.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 10. Storm water leaching basins are not permitted in loading/unloading areas (i.e. truck wells, loading docks).   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 11. Floor drains are prohibited unless they are connected to a sanitary sewer, holding tank or a state groundwater discharge permit has been obtained.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 12. No storm water may be disposed of off-site or to a public or private street except as approved.   |