



Village of Dimondale Stormwater Calculation Worksheet

Applicants for all projects creating new impervious area must fill out this worksheet and submit it to the Village Office. If the new impervious area is greater than 200 sq ft you must provide stormwater management.

This form will be used for single site development or redevelopment to determine compliance with Chapter 1050 of the Village of Dimondale Code of Ordinances. Development on large sites or proposed regional stormwater treatment for multiple sites may require a more rigorous analysis by the Village. These calculations will show compliance with the water quality control and bank erosion control design standards in 1050.14. In addition, no development shall cause an increase in runoff volume or rate from the condition existing previous to the development onto adjacent land at the 100 year event.

Date _____

Property Address _____ Phone #: _____

Applicant Name _____

Homeowner Name
(If Different than Applicant) _____

IMPERVIOUS AREA CALCULATION

Impervious Area to be Constructed

Structures (measure from outer edge of eaves)	+ _____ sq ft
Parking/storage areas (including on-site driveways)	+ _____ sq ft
Walkways	+ _____ sq ft
Patios and Courtyards	+ _____ sq ft
Other (specify _____)	+ _____ sq ft

Constructed Impervious Area Subtotal + _____ **sq ft**

Existing Impervious Area to be Removed

Structures (measure from outer edge of eaves)	- _____ sq ft
Parking/storage areas (including on-site driveways)	- _____ sq ft
Walkways	- _____ sq ft
Patios and Courtyards	- _____ sq ft
Other (specify _____)	- _____ sq ft

Removed Impervious Area Subtotal - _____ **sq ft**

+ _____ sq ft Minus **-** _____ sq ft = _____ sq ft

Constructed Impervious Area

Removed Impervious Area

New Impervious Area

If the "New Impervious Area" is less than 200 sq ft, no further information is necessary. Include this worksheet with the Zoning Transmittal.

If the "New Impervious Area" is greater than 200 sq ft, storage of the runoff generated from a 2 year, 24 hour storm or 2.41 inches of rain is required for the net new impervious area. Continue to the next calculation on the reverse side of this worksheet.

The following formula was developed by the Village of Dimondale to meet the performance standards identified in Chapter 1050.14 of the Village Code of Ordinances:

Square Footage of New Impervious Area x 0.17 = Cubic Feet of storage volume required

Multiply your “**New Impervious Area**” by 0.17 to determine the volume of storage required for your site.

$$\boxed{\text{sq ft}} \times 0.17 = \boxed{\text{cubic feet}}$$

New Impervious Area **Required Volume**

This formula is based on the additional volume of runoff generated from converting green space within the Village of Dimondale to impervious area for a 2 year, 24 hour storm, or 2.41 inches of rain on “B” soils.

Suggested Treatment Measures for Volume Control		
Treatment Measure	Formula	Storage Volume
Rain Barrel	____ gallons x 0.13369	Ft ³
Rain Garden/Bioretenion	____ ft (length) x ____ ft (width) x ____ ft (average depth) =	Ft ³
Drywell	____ ft (radius) x ____ ft (radius) x 3.14 x ____ ft (depth)=	Ft ³
Infiltration Trench (surface + subsurface)	____ ft (length) x ____ ft (width) x ____ ft (average depth) + ____ ft (length) x ____ ft (width) x ____ ft (average depth) x0.3 =	Ft ³
Cistern	____ gallons x 0.13369 OR ____ ft (radius) x ____ ft (radius) x 3.14 x ____ ft (depth)=	Ft ³
Swale	____ ft (length) x ____ ft (width) x ____ ft (average depth) =	Ft ³
Porous Pavement (includes stone storage layer)	____ ft (length) x ____ ft (width) x ____ ft (average depth) x0.3 =	Ft ³
Stone or amended soil layer under any surface practice to provide additional subsurface storage.	Dimensions are of subsurface stone or amended soil ____ ft (length) x ____ ft (width) x ____ ft (average depth) x0.3 =	Ft ³
Other:		Ft ³
Total Volume Controlled		Ft³

Recommended design criteria can be found in “Low Impact Development Manual for Michigan: A Design Guide for Implementers and Reviewers” located at <http://www.semcog.org/lowimpactdevelopment.aspx>

I hereby certify that the foregoing information is true and accurate to the best of my knowledge and that the work described will be completed within 12 months from the date of this document.

Owner or Agent

Date

Inspected By

Date