



## Guide to Stormwater Plans and Impervious Area Worksheet

### Land Development Code Section 6.05.03 Stormwater Plans for Single Family Dwelling Units, Two Family Dwelling Units and Duplexes

LDC section 6.05.03 establishes that a Type I or Type II Stormwater Plan is required on lots with single-family dwelling units, two-family dwelling units, or duplexes, with the following exceptions:

- Lots located in the Rural Agricultural (A) Zoning district outside the Immokalee Urban Area Overlay district and outside the coastal urban designated area as established in the Future Land Use Map; and
- Lots that have received a Surface Water Management or Environmental Resource Protection permit from the South Florida Water Management District.

*Stormwater plans may also be used to demonstrate compliance with Collier County Code of Laws and Ordinances section 90-41(f)(8).*

#### HOW TO SUBMIT A STORMWATER PLAN

- Stormwater plans must be included as a part of an application for a building permit which adds or modifies the impervious area on the property.
- Stormwater plans may be included on the site plan, certified site plan, or submitted as a separate document.
- Building permits that do not require a certified site plan must complete the attached impervious area worksheet.

*See Collier County Administrative Code for Land Development Chapter 4.M for more information regarding the submittal process.*

#### IMPERVIOUS AREA THRESHOLDS FOR TYPE I AND TYPE II STORMWATER PLANS

The type of stormwater plan that must be included with a building permit is determined by the percentage of impervious area on the property as described in LDC section 6.05.03 C and in Table 1 on the following page.

#### **Definitions (LDC section 6.05.03 B):**

**Impervious area:** roofed buildings, concrete and asphalt pads, cool deck (e.g. spraycrete), pavers with limerock base, swimming pools, and lined pond areas.

**Pervious area:** grass, crushed stone (e.g. #57), mulch, pavers without limerock base, and unlined pond area.



**Table 1 (LDC section 6.05.03 C):**

Zoning District or Lot Location	Required Stormwater Plan	
	Type I Stormwater Plan	Type II Stormwater Plan
RSF-1		
Rural Agricultural (A) within Immokalee Urban Area or Coastal Urban Area on FLUM	30% or less impervious area	Greater than 30% impervious area
Estates (E)	25% or less impervious area	Greater than 25% impervious area
Lots discharging to a waterbody downstream of the last control structure	All lots	N/A
Lots discharging to a waterbody upstream of the last control structure	N/A	All lots
Rural Agricultural (A) outside Immokalee Urban Area or Coastal Urban Area on FLUM	Exempt	
Lots with a surface water management or environmental resource permit from SFWMD		
All other lots	40% or less impervious area	Greater than 40% impervious area

**TYPE I STORMWATER PLAN REQUIREMENTS**

**Who can prepare Type I stormwater plans:**

- Florida registered design professionals (architects, landscape architects, or engineers),
- Licensed contractors, or
- Owner builders

**Required information** (must be included on all Type I plans):

- Lot area
- Total impervious area
- Building elevation (only required when a certified site plan is required)
- Building distance from property lines
- Directional stormwater flow arrows

**Conditional information** (must be included on Type I plans were applicable):

- If septic system present:
  - Include the location, dimension, and setbacks from property line.
- For buildings elevated over 18 inches above the crown of road (not required when using stem walls):



- Indicate the elevation/grade at property line
- Identify the proposed slope.
- For buildings or drainfields close to a property line:
  - Include a cross section of the slope.
- For buildings with gutter and downspouts closer than 10 feet to a property line:
  - Include note regarding downspout direction.
- If retaining walls are present:
  - Identify the distance from the property line.
- If discharging to a waterbody with a pipe:
  - Identify orifice size.
  - Identify stabilization method of the discharge area.

#### TYPE II STORMWATER PLAN REQUIREMENTS

**Who can prepare Type II stormwater plans:** Professional Engineers licensed in the state of Florida

**Required information** (must be included on all Type II plans):

- Applicable requirements for Type I stormwater plans.
- Signed and sealed site plan.
- Engineer's analysis (separate sheet or on site plan):
  - Include the total retention/detention area, depth, and volume.
  - Include the square feet of impervious area in excess of the applicable threshold in LDC section 6.05.03 and in Table 1 above.
- Cross section of retention/detention area with slope and elevation.
- Elevation of wet season water table in the impacted area.

**Conditional information** (must be included on Type II plans where applicable):

- If French drains are used:
  - Calculation for engineer's analysis = 40% void ratio.
- If discharging to a waterbody with a pipe:
  - Identify orifice size.
  - Identify stabilization method of the discharge area.

#### LINKS AND CONTACT INFORMATION

- Collier County Land Development Code: [www.municode.com](http://www.municode.com)
- Collier County Administrative Code for Land Development: [www.colliergov.net/admincode](http://www.colliergov.net/admincode)
- **For questions regarding stormwater plans:**
  - Brett Rosenblum, P.E.
  - Principal Project Manager
  - [BrettRosenblum@colliergov.net](mailto:BrettRosenblum@colliergov.net)
  - (239) 252-2905

