Contra Costa Clean Water Program

Stormwater C.3 Update

Requirements for New Development and Redevelopment Projects — February 2013

LID Measures for Small Projects…

Small Projects

- Small Projects are those that create or replace between 2,500 and 10,000 square feet of roofs or pavement
- Applicants for development approvals must submit a "Stormwater Control Plan for a Small Land Development Project"
- Most projects can comply by dispersing runoff from some or all roof leaders or sheet flow from some or all new pavement to an adjacent landscaped area.

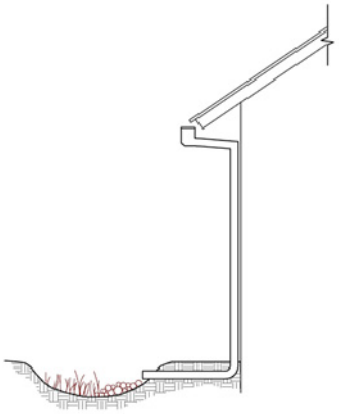
Municipal Regional Permit Provision C.3.i created requirements for "Small Projects"—those that create or replace between 2,500 and 10,000 square feet of impervious surface. This includes detached single-family home projects that create or replace 2,500 square feet or more of impervious surface.

Provision C.3.i. went into effect on December 1, 2012.

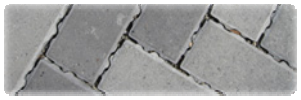
Applicants for development approvals for these projects must incorporate one or more Low Impact Development (LID) site design measures (runoff reduction measures) into the project. Typically, this involves dispersing some runoff from roofs or pavement to an adjacent landscaped area. Applicants may also comply by incorporating pervious pavement, such as pavers on sand or gravel (see design criteria), into the project.

The Contra Costa Clean Water Program (CCCWP) has published an addendum, *Preparing a Stormwater Control Plan for a Small Land Development Project,* to the the 6th Edition of the *Stormwater C.3 Guidebook*. The *Guidebook* and addendum are available on the CCCWP's website.

Stormwater Control Plans for "Small Projects" include a Project Data Form, a simple Site Plan or Sketch, and a completed checklist for each runoff reduction measure selected.



"Small Projects" can comply by dispersing runoff from a portion of the new paving or roof to an adjacent landscaped area or by incorporating pavers on a sand or gravel base.



…and for Larger Projects

A tabular summary of project thresholds and corresponding requirements is on page 2 of this *Stormwater C.3 Update.*

Contra Costa municipalities have adopted ordinances requiring applications for development approvals to be accompanied by a Stormwater Control Plan that meets the criteria in the most recent edition of the *Stormwater C.3 Guidebook.*

Chapter 3 of the *Guidebook* includes step-by-step instructions and a checklist for preparing a Stormwater Control Plan.

Chapter 4 of the *Guidebook*, "Low Impact Development Design Guide," provides minimum criteria and detailed design advice for integrating Low Impact Development features and facilities into a development project.

A Stormwater Control Plan template, available in MS Word on the CCCWP website, includes headings, table formats, and prompts for filling in the information required in a Stormwater Control Plan. The template has been updated for the 6th Edition and should be used in concert with instructions in the *Guidebook.*

CONTRA COSTA CLEAN WATER PROGRAM

www.cccleanwater.org

Provision C.3 Thresholds and Requirements

Impervious Area Threshold	Effective Date	Requirement
All projects requiring municipal approvals or permits (includes single-family residences)	May 1, 2010	As encouraged or directed by local staff, preserve or restore open space, riparian areas, and wetlands as project amenities; minimize land disturbance and impervious surfaces (especially parking lots); cluster structures and pavements; include micro-detention in landscaped and other areas, and direct runoff to vegetated areas. Use Bay-friendly landscaping features and techniques. Include Source Controls specified in *Guidebook* Appendix D.
Projects **between 2,500 and 10,000 square feet** requiring approvals or permits (includes single-family residences)	December 1, 2012	Install one or more of the following: Direct roof runoff into cisterns or rain barrels for reuse; direct roof runoff onto vegetated areas; direct runoff from sidewalks, walkways, and/or patios on to vegetated areas; direct runoff from driveways and/or uncovered parking lots on to vegetated areas; construct sidewalks, walkways, and/or patios with permeable surfaces; construct bike lanes, driveways, and uncovered parking lots with permeable surfaces.
Auto service facilities, gas stations, restaurants, and uncovered parking lots **over 5,000 square feet**	December 1, 2011	Prepare and submit a Stormwater Control Plan as described in *Guidebook* Chapter 3, including features and facilities to ensure runoff is treated before leaving the site. Evaluate feasibility of storage for later use. Use the LID Design Guide in Chapter 4, including sizing factors and criteria for treatment only.
All projects **between 10,000 square feet and one acre**	August 15, 2006	
Projects one acre and larger	October 14, 2006	Select one of four flow-control compliance options in Appendix C. Where required, design project features and facilities for hydrograph modification management (flow-control) as well as stormwater treatment. Evaluate feasibility of storage for later use. Prepare and submit a Stormwater Control Plan as described in Chapter 3 and use the LID Design Guide in Chapter 4, including the sizing factors and criteria for treatment and flow control.

This fact sheet is a summary only. See the Regional Water Board Orders and the Contra Costa Clean Water Program's *Stormwater C.3 Guidebook* for actual requirements.

Low Impact Development: Why and How

Low Impact Development (LID) reduces runoff and mimics a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or bio-treating stormwater runoff close to its source.

NPDES permits issued to all Contra Costa municipalities now mandate the use of LID for projects regulated under Provision C.3.

The LID Design Guide—Chapter 4 in CCCWP's *Stormwater C.3 Guidebook*—provides step-by-step instructions for designing development and redevelopment projects that comply with the requirements.

Conceptual LID design involves application of five techniques:

1. Optimize the site layout by preserving natural drainage features and minimizing roofs and paving.
2. Use pervious surfaces and green roofs.
3. Disperse runoff from impervious surfaces onto adjacent landscaping.
4. Store runoff and use it later for toilet flushing, irrigation or other uses.
5. Use bioretention to infiltrate and evapotranspirate a portion of runoff and to treat the remainder.

A map showing drainage management areas and LID facilities must be included in the Stormwater Control Plan for the project. An Integrated Management Practice Sizing Calculator, available at www.cccleanwater.org, facilitates calculations.

Bioretention facilities should be designed so the surface reservoir floods evenly to the design depth. This facility provides stormwater treatment and flow duration control for a Pittsburg office building and parking lot.