



STORMWATER CONTROL C.3 COMPLIANCE INFORMATION

Contents

- Pre-Application Stormwater Control Plan Checklist
- Preparing a Stormwater Control Plan for a Small Land Development Project
- Stormwater Control Plan Template
- Stormwater Control Plan Checklist
- Stormwater Control O&M Plan and O&M Agreement Checklist

PRE-APPLICATION STORMWATER CONTROL PLAN CHECKLIST



PRELIMINARY STORMWATER CONTROL PLAN

In order to ensure that compliance with C.3 requirements and minimize costly redesign of a project, it is imperative that stormwater treatment measures be considered during the preliminary planning of a project. For these reasons, a preliminary stormwater control plan will be required to be submitted with any pre-applications for projects subject to C.3 requirements.

WHAT ARE THE C.3 REQUIREMENT THRESHOLDS REQUIRING A STORMWATER CONTROL PLAN?

A Stormwater Control Plan is required for any project that:

- creates or replaces more than 5,000 sq. ft. of impervious area AND is considered a Special Land Use, i.e. auto service facility, retail gasoline outlet, restaurant, or uncovered parking lot, OR
- creates or replaces more than 10,000 sq. ft. of impervious area

If the project creates or replaces more than one acre of impervious area, the Stormwater Control plan must also address runoff flow control either by 1) demonstrating compliance with the City's Hydromodification Management (HM) Performance Standard, or 2) by demonstrating and documenting an exemption to the HM Performance Standard.

Development projects that create or replace 2,500 square feet or more of impervious surface (roofs or pavement) must incorporate one or more specified measures to reduce runoff. This requirement is part of municipalities' comprehensive effort to reduce runoff pollution.

WHAT IS REQUIRED TO BE PROVIDED ON A PRELIMINARY STORMWATER CONTROL PLAN?

Provide a preliminary Stormwater Control Plan to include the following:

- Site size in sq.ft.
 - Existing impervious surface area (all land covered by buildings, sheds, patios, parking lots, streets, paved walkways, driveways, etc.) in sq.ft.
 - Impervious surface are created, added or replaced in sq.ft.
 - Total impervious surface area in sq.ft. (Existing impervious area to remain and proposed impervious area)
 - Percent increase / replacement of impervious area surface area (new impervious surface area in sq.ft. / existing impervious surface area in sq.ft. multiplied by 100).
 - Estimated area in sq.ft. of land disturbance during construction (including clearing, grading or excavating).
 - Delineate and label the tributary areas and proposed BMPs.
 - Provide a table listing the tributary areas and associated BMPs. (Ensure that all tributary areas drain to associated BMPs.)
 - Ensure compliance with the proper sizing factors.
-



Preparing a Stormwater Control Plan for a Small Land Development Project

Addendum to the Stormwater C.3 Guidebook

December 1, 2012

Introduction

As of December 1, 2012, development projects that create or replace 2,500 square feet* or more of impervious surface (roofs or pavement) must incorporate one or more specified measures to reduce runoff. This requirement is part of municipalities' comprehensive effort to reduce runoff pollution. The requirement is mandated by Provision C.3.i. in the [Municipal Regional Stormwater Permit](#) issued by the California Regional Water Quality Control Boards for the San Francisco Bay Region and Central Valley Region.

It is fairly easy to achieve compliance with the stormwater requirements for small land development projects. Compliance for each project must be carefully documented. Please complete the following form and submit it as directed by municipal staff.

*All projects that create or replace 10,000 square feet or more of impervious surface—and auto service facilities, gas stations, restaurants, and uncovered parking lots that create or replace 5,000 square feet or more of impervious surface—are “Regulated Projects,” and require a more comprehensive Stormwater Control Plan. See the Contra Costa Clean Water Program *Stormwater C.3 Guidebook*.

Step-by-Step Instructions

The steps are:

1. Fill out the Project Data Form (below) and select one or more runoff reduction measures.
2. Prepare a site plan or sketch. Specify and design the runoff reduction measure you will use to meet the stated minimum requirements.
3. Complete your submittal, which will include:
 - Project Data Form
 - Site Plan or Sketch
 - Completed checklist for each Runoff Reduction Measure selected

► **STEP 1: PROJECT DATA FORM AND RUNOFF REDUCTION MEASURE SELECTION**

Complete all fields.

Project Name/Number	
Application Submittal Date [to be verified by municipal staff]	
Project Location [Street Address if available, or intersection and/or APN]	
Name of Owner or Developer	
Project Type and Description [Examples: “Single Family Residence,” “Parking Lot Addition,” “Retail and Parking”]	
Total Project Site Area (acres)	
Total New Impervious Surface Area (square feet) [Sum of currently pervious areas that will be covered with new impervious surfaces]	
Total Replaced Impervious Surface Area [Sum of currently impervious areas that will be covered with new impervious surfaces.]	
Total Pre-Project Impervious Surface Area	
Total Post-Project Impervious Surface Area	
Runoff Reduction Measures Selected (Check one or more)	<input type="checkbox"/> 1. Disperse runoff to vegetated area <input type="checkbox"/> 2. Pervious pavement <input type="checkbox"/> 3. Cisterns or Rain Barrels <input type="checkbox"/> 4. Bioretention Facility or Planter Box

► **STEP 2: DELINEATE IMPERVIOUS AREAS AND LOCATIONS OF RUNOFF REDUCTION MEASURES**

Delineate the impervious area. On a site plan or sketch, show the impervious area—for example, a roof, or portion of a roof, or a paved area—that will drain to your runoff reduction measure. Typically these delineations follow roof ridge lines or grade breaks. Alternatively, show the type and extent of pervious paving. An example sketch is attached.

Indicate the location and kind of runoff reduction measure you’ve selected. At least one option, designed to manage runoff from some amount of impervious area—or to avoid creating runoff—is required.

For each option selected, there is a brief checklist to confirm your design and your submittal meet minimum requirements.

► **STEP 3: COMPLETE AND SUBMIT YOUR PLAN**

Consult with municipal staff about when and how to submit your Stormwater Control Plan for Small Projects.

Option 1: Disperse runoff from roofs or pavement to vegetated areas.

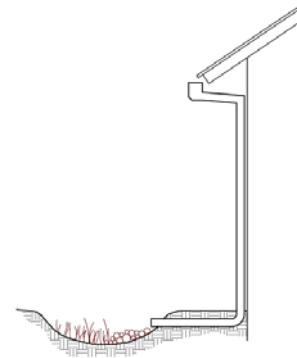
This is the simplest option. Downspouts can be directed to vegetated areas adjacent to buildings, or extended via pipes to reach vegetated areas further away. Paved areas can be designed with curb cuts, or without curbs, to direct flow into surrounding vegetation.

On the site plan, show:

- Each impervious area from which runoff will be directed, and its square footage.
- The vegetated areas that will receive runoff, and the approximate square footage of each.
- If necessary, explain in notes on the plan how runoff will be routed from impervious surfaces to vegetated areas.

Confirm the following standard specifications are met:

- Tributary impervious square footage in no instance exceeds twice the square footage of the receiving pervious area.
- Roof areas collect runoff and route it to the receiving pervious area via gutters and downspouts.
- Paved areas are sloped so drainage is routed to the receiving pervious area.
- Runoff is dispersed across the vegetated area (for example, with a splash block) to avoid erosion and promote infiltration.
- Vegetated area has amended soils, vegetation, and irrigation as required to maintain soil stability and permeability.
- Any drain inlets within the vegetated area are at least 3 inches above surrounding grade.



Connecting a roof leader to a vegetated area. The head from the eave height makes it possible to route roof drainage some distance away from the building.

Option 2: Permeable Pavement

This option can be easy to install and maintain, cost-effective, and can add aesthetic value to your project. Permeable pavements may include pervious concrete, pervious asphalt, porous pavers, crushed aggregate, open pavers with grass or plantings, open pavers with gravel, or solid pavers.

Show on your site plan:

- Location, extent and types of pervious pavements.

Confirm the following standard specifications are met:

- No erodible areas drain on to permeable pavement.
- Subgrade compaction is minimal.
- Reservoir base course is of open-graded crushed stone. Base depth is adequate to retain rainfall (3 inches is adequate) and support design loads (more depth may be required).
- No subdrain is included or, if a subdrain is included, outlet elevation is a minimum of 3 inches above bottom of base course.
- Subgrade is uniform and slopes are not so steep that subgrade is prone to erosion.
- Rigid edge is provided to retain granular pavements and unit pavers.
- Solid unit pavers, if used, are set in sand or gravel with minimum 3/8 inch gaps between the pavers. Joints are filled with an open-graded aggregate free of fines.
- Permeable concrete or porous asphalt, if used, are installed by industry-certified professionals according to the vendor's recommendations.
- Selection and location of pavements incorporates Americans with Disabilities Act requirements (if applicable), site aesthetics, and uses.



Option 3: Cisterns or Rain Barrels

Use of cisterns or rain barrels to comply with this requirement is subject to municipality approval. Planning and Building Permits may be required for larger systems.

Show on your site plan:

- Impervious areas tributary to each cistern or rain barrel.
- Location of each cistern or rain barrel.

Confirm the following standard specifications are met:

- Rain barrels are sited at grade on a sound and level surface at or near gutter downspouts.
- Gutters tributary to rain barrels are screened with a leaf guard or maximum 1/2-inch to 1/4-inch-minimum corrosion-resistant metallic hardware fabric.
- Water collected will be used for irrigation only.
- Openings are screened with a corrosion-resistant metallic fine mesh (1/16 inch or smaller) to prevent mosquito harborage.
- Large openings are secured to prevent entry by children.
- Rain barrels and gutters are to be cleaned annually.
- The Contra Costa Mosquito and Vector Control District is informed of the installation. The District will be provided additional information and/or rights of entry if they request.

Option 4: Bioretention Facility or Planter Box

An above-ground planter box may be appropriate if the development site lacks level landscaped areas for dispersion and pervious pavements are not practical. Planter boxes and bioretention facilities can treat runoff from impervious surfaces 25 times their area (sizing factor of 0.04).

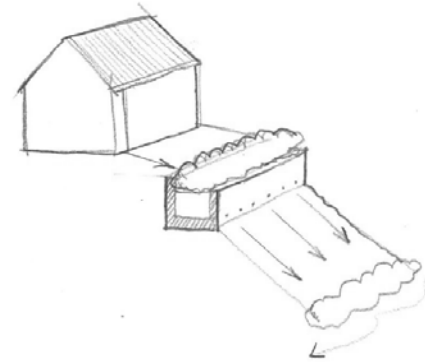
Detailed design guidance for planter boxes and bioretention areas is in the *Contra Costa Clean Water Program Stormwater C.3 Guidebook*.

Show on your site plan:

- Impervious areas tributary to the planter box.
- Location and footprint of planter box.

Confirm the following standard specifications are met:

- Reservoir depth is 4"-6" minimum.
- 18" depth soil mix with minimum long-term infiltration rate of 5"/hour. See <http://www.cccleanwater.org/c3-guidebook.html> for a list of soil mix suppliers.
- Surface area of soil mix is a minimum 0.04 times the tributary impervious area.
- "Class 2 perm" drainage layer 12" deep.
- No filter fabric.
- Perforated pipe (PVC SDR 35 or approved equivalent) underdrain with outlet located flush or nearly flush with planter bottom.
- Connection with sufficient head to storm drain or discharge point.
- Underdrain has a clean-out port consisting of a vertical, rigid, non-perforated PVC pipe, connected to the underdrain via a sweep bend, with a minimum diameter of 4" and a watertight cap.
- Overflow outlet connected to a downstream storm drain or approved discharge point.
- Planter is set level.
- Emergency spillage will be safely conveyed overland.
- Plantings are suitable to the climate, exposure, and a well-drained soil.
- Irrigation system with connection to water supply, on a separate zone.



Flow-through planter built into a hillside. Flows from the underdrain and overflow must be directed in accordance with local requirements.

Useful Resources

The following references may be useful for design. Designs must meet the minimum standard specifications in this supplement to the *Stormwater C.3 Guidebook*.

Contra Costa Clean Water Program Stormwater C.3 Guidebook. Available at <http://www.cccleanwater.org/c3-guidebook.html>

Start At the Source: Design Guidance Manual for Stormwater Quality. Bay Area Stormwater Management Agencies Association, 1999. Available at <http://www.cccleanwater.org/c3-resources.html>

Stormwater Control for Small Projects Fact Sheets. Bay Area Stormwater Management Agencies Association, 2012. Available at <http://www.cccleanwater.org/c3-resources.html>

Concrete Promotion Council of Northern California www.concreteresources.net.

California Asphalt Pavement Association
<http://www.californiapavements.org/stormwater.html>

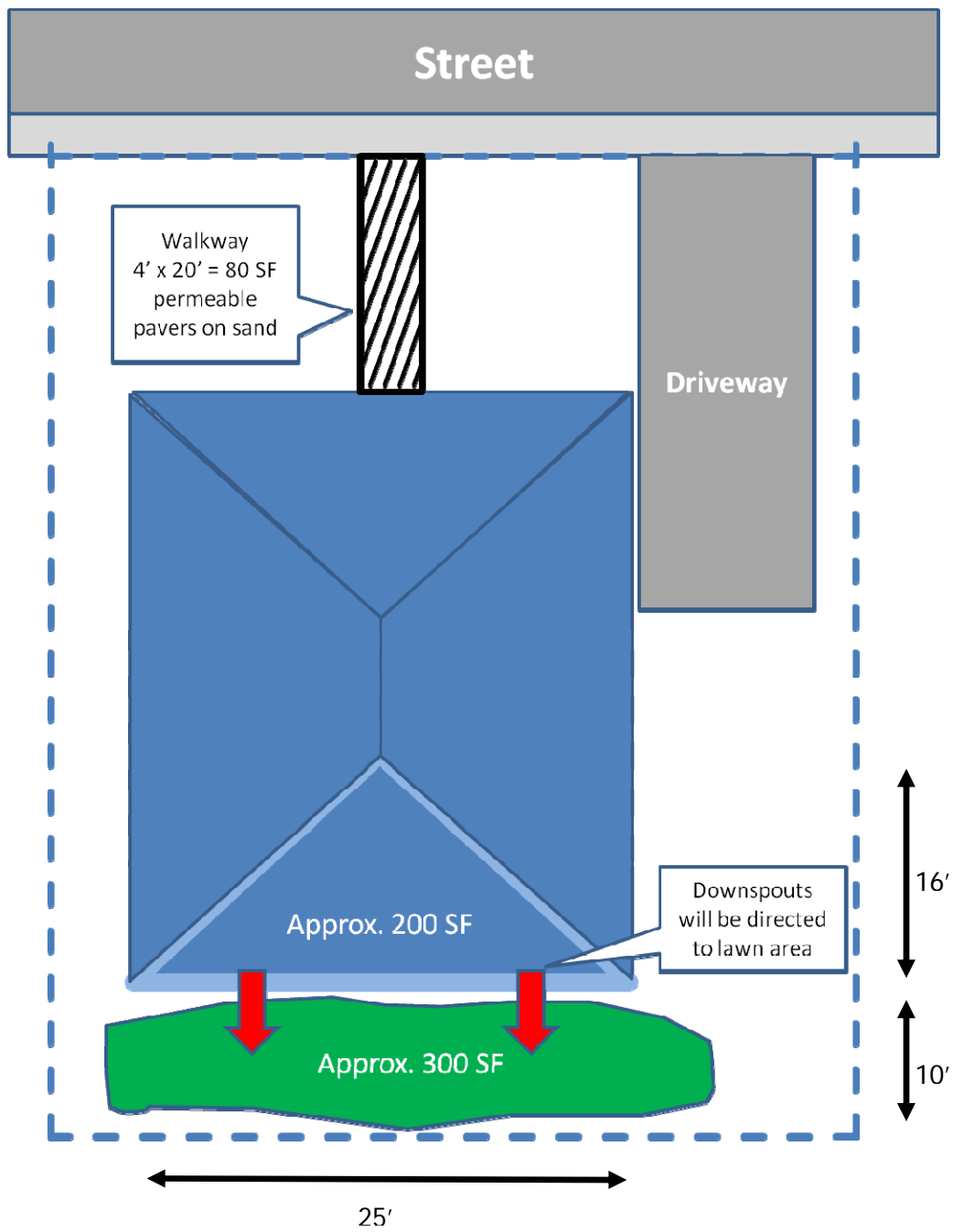
Interlocking Concrete Pavement Institute
<http://www.icpi.org/>

Porous Pavements, by Bruce K. Ferguson. 2005. ISBN 0-8493-2670-2

Example Sketch

The example below illustrates the level of detail required.

Not to Scale





STORMWATER CONTROL PLAN
for
[NAME OF PROJECT]

[date]

[This template is to be used in conjunction with the instructions, criteria, and minimum requirements in the Contra Costa Clean Water Program *Stormwater C.3 Guidebook, 6th Edition*.

Check the Contra Costa Clean Water Program website at www.cccleanwater.org/c3.html for new information and updates to the Guidebook and this template.]

**[Name of Owner]
[Owner's Representative and Contact Information]**

prepared by:

**[Preparer's Name]
[Preparer's Contact Information]**

TABLE OF CONTENTS

I.	Project Data [Complete the following table and include in Stormwater Control Plan.]	1
II.	Setting	2
II.A.	Project Location and Description	2
II.B.	Existing Site Features and Conditions	2
II.C.	Opportunities and Constraints for Stormwater Control	2
III.	Low Impact Development Design Strategies	2
III.A.	Optimization of Site Layout	2
III.A.1.	Limitation of development envelope	2
III.A.2.	Preservation of natural drainage features	2
III.A.3.	Setbacks from creeks, wetlands, and riparian habitats	2
III.A.4.	Minimization of imperviousness	2
III.A.5.	Use of drainage as a design element	2
III.B.	Use of Permeable Pavements	2
III.C.	Dispersal of Runoff to Pervious Areas	2
III.D.	Feasibility Assessment of Harvesting and Use for Treatment and Flow-Control	2
III.D.1.	Permeability of Site Soils	2
III.D.2.	Potential Opportunities for Harvesting and Use	3
III.D.3.	Harvesting and Use Feasibility Calculations	3
III.E.	Integrated Management Practices	3
IV.	Documentation of Drainage Design	3
IV.A.	Descriptions of each Drainage Management Area	3
IV.A.1.	Table of Drainage Management Areas	3
IV.A.2.	Drainage Management Area Descriptions	3
IV.B.	Tabulation and Sizing Calculations	4
IV.B.1.	Information Summary for IMP Design	4
IV.B.2.	Self-Treating Areas	4
IV.B.3.	Self-Retaining Areas	4
IV.B.4.	Areas Draining to Self-Retaining Areas	4
IV.B.5.	Areas Draining to IMPs	5
IV.B.6.	Areas Draining to Non-LID Treatment (“Special Projects” only)	5
V.	Source Control Measures	5
V.A.	Site activities and potential sources of pollutants	5
V.B.	Source Control Table	5
V.C.	Features, Materials, and Methods of Construction of Source Control BMPs	6
VI.	Stormwater Facility Maintenance	6
VI.A.	Ownership and Responsibility for Maintenance in Perpetuity	6
VI.B.	Summary of Maintenance Requirements for Each Stormwater Facility	6
VII.	Construction Plan C.3 Checklist	6
VIII.	Certifications	6

Tables

Table 1. Project Data X

Table x. Assessment of Harvesting and Use (Toilet Flushing and Irrigation) X

Table x. Self-Treating Areas X

Table x. Self-Retaining Areas..... X

Table x. Areas Draining to Self-Retaining Areas..... X

Table x. IMP Sizing Calculations. X

Table x. Non-LID Treatment Measures..... X

Table x. Sources and Source Control Measures X

Table x. Construction Plan C.3 Checklist..... X

Figures

Vicinity Map X

Attachments

Stormwater Control Plan Exhibit

Appendix

HMP Compliance [if applicable]

This Stormwater Control Plan was prepared using the template dated February 15, 2012.

I. PROJECT DATA [Complete the following table and include in Stormwater Control Plan.]

Table 1. Project Data

Project Name/Number	
Application Submittal Date	[to be verified by municipal staff]
Property/Land Owner name, address & Phone no.	
Project Location & APN	[Street Address if available, or intersection and APN]
Name of Developer	
Project Phase No.	[If project is being constructed in phases, indicate the phase number. If not, enter "NA"]
Project Type and Description	[Example entries: "5-story office building," "Residential with 50 single-family homes with five 4-story buildings to contain 200 condominiums," "100-unit, 2-story shopping mall," "mixed use retail and residential development (apartments)", "Industrial warehouse."]
Project Watershed	[Request from municipal staff]
Total Project Site Area (acres)	
Total Area of Land Disturbed (acres)	
Total New Impervious Surface Area (sq. ft.)	
Total Replaced Impervious Surface Area	
Total Pre-Project Impervious Surface Area	
Total Post-Project Impervious Surface Area	
50% Rule[*]	[Applies or Doesn't Apply]
Project Density	[State DU/Acre and/or Floor Area Ratio]
Applicable Special Project Categories [Complete even if all treatment is LID]	[State A, B, C, or none. If "C", state basis for location credits, density, and parking credits.]
Percent LID and non-LID treatment	[State totals for project and provide details under "Documentation of Drainage Design."]
HMP Compliance [†]	[Note "Doesn't Apply," or state Option 1, 2, 3, or 4. See Guidebook Table 1-2 on p. 9]

[*50% rule applies if:

Total Replaced Impervious Surface Area > 0.5 x Pre-Project Impervious Surface Area]

[If HMP applies if:
(Total New Impervious Surface Area + Total Replaced Impervious Surface Area) \geq 1 acre]

II. SETTING

II.A. Project Location and Description

[Include site location, division of parcels, planned land uses, zoning, setback and open space requirements, project phasing, number of residential units or square footage of office or retail, parking requirements, neighborhood character, project design objectives (for example LEED certification), other notable project characteristics. A vicinity map may also be useful.]

II.B. Existing Site Features and Conditions

[Include site size, shape, and topography. Hydrologic features, including any contiguous natural areas, wetlands, watercourses, seeps, or springs. Existing land uses. Soil types and hydrologic soil groups, vegetative cover, and impervious areas, if any. Existing drainage for site and nearby areas, including location of municipal storm drains.]

II.C. Opportunities and Constraints for Stormwater Control

[Examples of constraints: impermeable soils, high groundwater, groundwater pollution or contaminated soils, steep slopes, geotechnical instability, density/high-intensity land use, heavy pedestrian or vehicular traffic, utility locations, safety concerns.]

[Examples of opportunities: Existing natural areas, low areas, oddly configured or otherwise unbuildable areas, easements and required landscape amenities including open space and buffers that might be used for bioretention facilities, and differences in elevation, which can provide needed hydraulic head.]

III. LOW IMPACT DEVELOPMENT DESIGN STRATEGIES

III.A. Optimization of Site Layout

III.A.1. Limitation of development envelope

III.A.2. Preservation of natural drainage features

III.A.3. Setbacks from creeks, wetlands, and riparian habitats

III.A.4. Minimization of imperviousness

III.A.5. Use of drainage as a design element

III.B. Use of Permeable Pavements

III.C. Dispersal of Runoff to Pervious Areas

III.D. Feasibility Assessment of Harvesting and Use for Treatment and Flow-Control

III.D.1. Permeability of Site Soils

[If site soils have a saturated hydraulic permeability of 1.6 inches/hour or greater, bioretention or dry wells/other infiltration facilities may be used, and a determination of the feasibility of harvesting and use is not required.]

III.D.2. *Potential Opportunities for Harvesting and Use*

[Identify and describe impervious areas from which runoff may be harvested and used. Contiguous roof areas 10,000 square feet and larger must be listed.]

III.D.3. *Harvesting and Use Feasibility Calculations*

[Extend table as needed for each impervious area from which runoff may be harvested and used. See the instructions in *Guidebook* Chapter 4. Document any project-specific data.]

Table x. *Harvesting and Use Feasibility*

A	B	C	D	E	F	G	H	I	J
<i>Building or other Impervious Area Description</i>	<i>Square feet of impervious surface</i>	<i>Acres</i>	<i>Uses and User Units</i>	<i>Toilet and Urinal Water Usage (gal/ day)</i>	<i>Water Use per Acre (gal/ day/ acre)</i>	<i>Required demand (gal/ day / acre).</i>	<i>Is Projected Use > Required Demand? (Column F > Column G?)</i>	<i>Can runoff be piped to an irrigated area 2.5x the impervious area (Column B)?</i>	<i>Is there any other consistent, reliable demand for the quantity in Column G?</i>

III.E. **Integrated Management Practices**

IV. DOCUMENTATION OF DRAINAGE DESIGN

IV.A. **Descriptions of each Drainage Management Area**

IV.A.1. *Table of Drainage Management Areas*

DMA Name Surface Type Area (square feet)

--	--	--

IV.A.2. *Drainage Management Area Descriptions*

DMA [name], totaling x,xxx square feet, drains [description of area]. DMA [name] drains to [Self-Retaining DMA name or IMP name]. [Describe notable or exceptional characteristics or conditions.]

DMA [name], totaling x,xxx square feet, drains [description of area]. DMA [name] drains to [Self-Retaining DMA name or IMP name]. [Describe notable or exceptional characteristics or conditions.]

DMA [name], totaling x,xxx square feet, drains [description of area]. DMA [name] drains to [Self-Retaining DMA name or IMP name]. [Describe notable or exceptional characteristics or conditions.]

DMA [name], totaling x,xxx square feet, drains [description of area]. DMA [name] drains to [Self-Retaining DMA name or IMP name]. [Describe notable or exceptional characteristics or conditions.]

[For DMAs draining to non-LID treatment systems, include a description of the uses of all impervious paved areas, and for landscaped areas, a description of the technical constraints

preventing their use as LID IMPs. Also include a narrative discussion of the infeasibility of offsite treatment.]

IV.B. Tabulation and Sizing Calculations

IV.B.1. Information Summary for IMP Design

Total Project Area (Square Feet)	[should be consistent with acreage in Table 1]
Mean Annual Precipitation	[at project site]
IMPs Designed For:	[treatment only or treatment + flow control]

IV.B.2. Self-Treating Areas

[Extend table to list additional DMAs. Note: The following tables may be generated using the Program’s IMP Sizing Calculator, available on the Program’s C.3 web pages.]

DMA Name Area (square feet)

--	--

IV.B.3. Self-Retaining Areas

[Extend table to list additional DMAs. Include areas for which runoff is to harvested and used.]

DMA Name Area (square feet)

--	--

IV.B.4. Areas Draining to Self-Retaining Areas

[Extend table to list additional DMAs.]

<i>DMA Name</i>	<i>Area (square feet)</i>	<i>Post-project surface type</i>	<i>Runoff factor</i>	<i>Product runoff factor</i> [A]	<i>Receiving self-retaining DMA</i>	<i>Receiving self-retaining DMA Area (square feet)</i> [B]	<i>Ratio [A] / [B]</i>

IV.B.5. Areas Draining to IMPs

[Copy entire table once for each IMP.]

DMA Name	DMA Area (square feet)	Post-project surface type	DMA Runoff factor	DMA Area × runoff factor	Soil Type:	IMP Name			
						IMP Sizing factor	Rain Adjustment Factor	Minimum Area or Volume	Proposed Area or Volume
Total									IMP Area
									V or V1
									V2
									Orifice Size:

IV.B.6. Areas Draining to Non-LID Treatment [“Special Projects” only—See Table 4-14, p. 60]

DMA Name	Area (square feet)	Non-LID Treatment System	Minimum Design Criteria Referenced

V. SOURCE CONTROL MEASURES

V.A. Site activities and potential sources of pollutants

V.B. Source Control Table

[See the instructions on page 28 of the Guidebook and the checklist in Appendix D.]

Potential source of runoff pollutants	Permanent source control BMPs	Operational source control BMPs

V.C. Features, Materials, and Methods of Construction of Source Control BMPs

VI. STORMWATER FACILITY MAINTENANCE

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

[Include (1) a commitment to execute any necessary agreements and/or annex into a fee mechanism, per local requirements, and (2) a statement accepting responsibility for operation and maintenance of facilities until that responsibility is formally transferred.]

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

[See the Operation and Maintenance fact sheets at <http://www.ccleanwater.org/c3-guidebook.html>]

VII. CONSTRUCTION PLAN C.3 CHECKLIST

[See the instructions on page 31 of the Guidebook.]

*Stormwater
Control
Plan
Page #*

BMP Description

See Plan Sheet #s

<i>Stormwater Control Plan Page #</i>	<i>BMP Description</i>	<i>See Plan Sheet #s</i>

VIII. CERTIFICATIONS

The selection, sizing, and preliminary design of stormwater treatment and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R2-2009-0074 and Order R2-2011-0083.

[Check with local staff regarding other certification requirements.]



STORMWATER CONTROL PLAN CHECKLIST

CONTENTS OF EXHIBIT

Show all of the following on drawings:

- Existing natural hydrologic features (depressions, watercourses, relatively undisturbed areas) and significant natural resources. (Step 1 in the step-by-step instructions included in the Vallejo Stormwater C.3 Guidebook)
- Existing and proposed site drainage network and connections to drainage off-site. (Step 3)
- Layout of buildings, pavement, and landscaped areas. (Step 3)
- Impervious areas proposed (roof, plaza/sidewalk, and streets/parking) and area of each. (Step 3)
- Entire site divided into separate Drainage Management Areas, with each DMA identified as self-treating, self-retaining (zero-discharge), draining to a self-retaining area, or draining to an IMP. Each DMA has one surface type (roof, paving, or landscape), is labeled, and square footage noted. (Step 3)
- Locations and sizes of proposed treatment and flow-control facilities. (Step 3)
- Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix D and corresponding required source controls. (Step 4)

CONTENTS OF REPORT

Include all of the following in a report:

- Narrative analysis or description of site features and conditions that constrain, or provide opportunities for, stormwater control. Include soil types (including Hydrologic Soil Group), slopes, and depth to groundwater (Step 2)
 - Narrative description of site design characteristics that protect natural resources. (Step 3)
 - Narrative description and/or tabulation of site design characteristics, building features, and pavement selections that minimize imperviousness of the site. (Step 3)
 - Evaluation of the feasibility of infiltration, evapotranspiration, and harvesting and reuse (Step 3).
 - Tabulation of DMAs, including self-treating areas, self-retaining areas, areas draining to self-retaining areas, and areas tributary to Integrated Management Practices (IMPs), in the format shown in Chapter 4. Output from the IMP Sizing Calculator may be used. (Step 3)
 - Sketches and/or descriptions showing there is sufficient hydraulic head to route runoff into, through, and from each IMP to an approved discharge point. (Step 3)
 - A table of identified pollutant sources and for each source, the source control measure(s) used to reduce pollutants to the maximum extent practicable. See Appendix D. (Step 4)
 - General maintenance requirements for infiltration, treatment, and flow-control facilities. (Step 5)
 - Means by which facility maintenance will be financed and implemented in perpetuity. (Step 5)
 - Statement accepting responsibility for interim operation & maintenance of facilities. (Step 5)
 - Identification of any conflicts with codes or requirements or other anticipated obstacles to implementing the Stormwater Control Plan. (Step 6)
 - Construction Plan C.3 Checklist. (Step 6)
 - Certification by a civil engineer, architect, and landscape architect. (Step 6)
 - Appendix: Compliance with flow-control requirements (if using an HMP compliance option other than Option 2, Integrated Management Practices).
-

Requirement	Requirement Met?
VII. Maintenance Schedule or Matrix A. Maintenance Schedule for each facility with specific requirements for: (1) Routine inspection and maintenance (2) Annual inspection and maintenance (3) Inspection and maintenance after major storms	
B. Service Agreement Information Assemble and make copies of your O&M Plan. One or more copies must be submitted to the municipality, and at least one copy kept on-site. Here are some suggestions for formatting the O&M Plan: <ul style="list-style-type: none"> • Format plans to 8½" x 11" to facilitate duplication, filing, and handling. • Include the revision date in the footer on each page. • Scan graphics and incorporate with text into a single electronic file. Keep the electronic file backed-up so that copies of the O&M Plan can be made if the hard copy is lost or damaged. 	
O&M Agreement Requirement	
I. PLAT MAP AND LEGAL DESCRIPTION A. Prepare a plat map and legal description of your property to accurately depict the boundaries of the property. B. If possible show the locations of the stormwater treatments in reference to the property boundaries. <ul style="list-style-type: none"> • Format plans to 8½" x 11" to facilitate duplication filing, and handling. • Include the revision date on all plans. 	
II. Sign and record O&M Agreement provided by City to applicant	

** The O&M Plan checklist is based on “Step 5: Compile O&M Plan” from Chapter 6 (Stormwater Facility Maintenance) of the 6th Edition CCCWP Stormwater C.3 Guidebook.