



# CONSTRUCTION/POST CONSTRUCTION STORMWATER PACKET

## CITY OF SOLVANG Public Works DEPARTMENT

411 Second Street | Solvang, CA 93463 | (805) 688-5575 | [www.cityofsolvang.com](http://www.cityofsolvang.com)

Development projects that create or replace 2,500 sf or more of impervious surface (new structures, roofs, or pavement, asphalt, concrete) must incorporate specific measures to reduce stormwater runoff. This Stormwater Control Plan template applies all proposed development projects that propose the following:

- Proposed New Construction of Residential Units
- Proposed New Accessory Dwelling Units
- Proposed New Construction of Commercial/Industrial/Mixed-Use Projects
- Proposed Residential Addition
- Proposed Commercial Addition
- Proposed Accessory Structures over 120 square feet

Please complete the following template and include with either your planning application or building application. It is fairly easy to accomplish the stormwater requirements for most projects. However, compliance must be documented. City staff will review your Stormwater Control Plan, site plan, and associated permit submittals. If you have any questions regarding this form or uncertain if a specific requirement applies to your project, please contact the public works staff at (805) 688-5575x220 or via email at [buildingdept@cityofsolvang.com](mailto:buildingdept@cityofsolvang.com)

<b>STEP 1 – PROJECT DATA</b>	
(Must Be Completely Filled By Applicant or Representative/Agent)	
Project Address:	
APN:	
Project Description:	
Name of Property Owner:	
Name of Representative/Agent:	
Is the proposed project a new Single Family Home? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Is the proposed project a new ADU? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Is the proposed project an addition to an existing residence? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Impervious Surface Calculation</b>	
Proposed New and Replacement Impervious Surface Area (Provide the total of new proposed impervious surface created by the project in square feet (sf). This includes all new structures, carports, patio covers, asphalt area, concrete, etc.)	
Total Existing Impervious Surface Area (provide the total of existing impervious surface. This includes existing buildings, sheds, patio covers, carports, concrete, asphalt, and other hard surfaces that will remain after the project is complete)	
Total Project Impervious Surface Created (Subtract New and Replacement Impervious Surface Area from Existing Impervious Surface that will remain) <i>Auto calculated if using electronic form</i>	

**STEP 2 - QUESTIONNAIRE**

(Must Be Completely Filled By Applicant or Representative/Agent)

Does the total post project impervious surface create more than 2,500 square feet of new impervious surface?

- Yes                       No

If Yes, please fill out part 3.

Does the total post project impervious surface create or replace more than 5,000 square feet of new impervious surface? (new single family homes are exempt)

- Yes                       No

If Yes, please fill out part 3 and 4.

Does the total post project impervious surface create or replace more than 15,000 square feet of new impervious surface?

- Yes                       No

If Yes, please fill out part 3, 4 and 5.

Does the total post project impervious surface create or replace more than 22,000 square feet of new impervious surface?

- Yes                       No

If Yes, please fill out part 3, 4, 5, and 6.

**STEP 3 – STORMWATER CONTROL PLAN RUNOFF REDUCTION MEASURE TIER 1**

(Must be completely filled By Applicant or Representative/Agent for projects with 2,500 of new impervious surface and checkmark which measures you are implementing. Please note, additional measures may be required by the city engineer to ensure compliance with Solvang Municipal Code Title 14.)

Please check mark which measures the proposed project shall be utilizing

**Measure 1 – Disperse runoff from roofs or pavement to vegetated areas**

This is the simplest option. Downspouts can be directed to flat or concave 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. Plans must 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.

Civil Sheet/Site Plan shall include the following (*applicant shall checkmark all that is shown*):

- Pervious areas must be relatively flat and if graded, the surface should be slightly concave. Tributary impervious square footage in no instance exceeds twice the square footage of the receiving pervious area. On your sketch, show rough dimensions that will confirm this criterion is met.
- 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 area drains within the vegetated area have inlets at least 3 inches above surrounding grade.

**Measure 2 – Permeable Pavers**

Permeable pavements may include pervious concrete, pervious asphalt, porous pavers, crushed aggregate, open pavers with grass or plantings (turf block), open pavers with gravel, or solid pavers with open (non-grouted) joints. Plans must show:

- Location, extent and types of pervious pavements.

Civil Sheet/Site Plan shall include the following (*applicant shall checkmark all that is shown*):

- No erodible areas drain on to permeable pavement.
- Subgrade compaction is minimal.
- Reservoir base course is of open-graded crushed stone. Base depth (3" or more) is adequate to retain rainfall

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 level 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.

**Measure 3 – Cisterns or Rain Barrels**

Use of cisterns or rain barrels to comply with this requirement may be subject to municipality approval. Planning and Building Permits may be required for very large systems. Plans must show the following:

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

Civil/Site Plan shall include the following (*applicant shall checkmark all that is shown*):

- Rain barrels are sited at or above 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.
- Lids are secured to prevent entry by children (noted on plans).
- Rain barrels and gutters are to be cleaned annually (noted on plans).

**Measure 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). Detail design guidance for bioretention facilities can be found in the Stormwater Technical Guide. Site Plans and Civil Plans shall show:

- Impervious areas tributary to the facility.
- Location and footprint of facility.

Civil/Site Plan shall include the following (*applicant shall checkmark all that is shown*):

- Ponding depth is 4"-6" minimum.
- Minimum 18" depth soil mix (60%-70% sand; 30%-40% compost) with minimum long-term infiltration rate of 5"/hour.
- Surface area of soil mix is a minimum 0.04 times the tributary impervious area.
- "Class 2 permeable" (Caltrans specification 68-2.02(F)(3) drainage layer 12" deep.
- No filter fabric.
- Perforated pipe (PVC SDR 35 or approved equivalent) underdrain.
- 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, if any, controlled as a separate zone.

**STEP 4 – TIER 2 PROJECTS**

(Applicant/representative shall demonstrate the following for projects with 5,000 of new or replacement impervious surface to ensure compliance with Solvang Municipal Code Title 14 and compliance with requirements from the Central Coast Regional Water Quality Control Board)

Project Submittals shall include the following:

- Implement measures identified in Tier 1
- Treat runoff with an approved and appropriately sized LID treatment system prior to discharge from the site.

Project Plans Shall include the following (applicant shall checkmark all that is provided):

- Stormwater Control Plan
- Stormwater Control Plan Exhibit
- Stormwater Control Measure Sizing Calculator
- Operation & Maintenance Plan
- Drainage Calculations/Report
- Percolation Report (Infiltration rates)
- Soils Report
- Drainage Facilities Stormwater Maintenance Agreement

**STEP 5 – TIER 3 PROJECTS**

(Applicant/representative shall demonstrate the following for projects with 15,000 of new or replacement impervious surface to ensure compliance with Solvang Municipal Code Title 14 and compliance with requirements from the Central Coast Regional Water Quality Control Board)

Project Submittals shall include the following:

- Implement measures identified in Tier 1
- Implement measures identified in Tier 2
- Prevent offsite discharge from events up to the 95th percentile rainfall event using Stormwater Control Measures.

Project Plans Shall include the following:

- Stormwater Control Plan
- Stormwater Control Plan Exhibit
- Stormwater Control Measure Sizing Calculator
- Operation & Maintenance Plan
- Drainage Calculations/Report
- Percolation Report (Infiltration rates)
- Soils Report
- Drainage Facilities Stormwater Maintenance Agreement

**STEP 6 – TIER 4 PROJECTS**

(Applicant/representative shall demonstrate the following for projects with 22,500 of new or replacement impervious surface to ensure compliance with Solvang Municipal Code Title 14 and compliance with requirements from the Central Coast Regional Water Quality Control Board)

Project Submittals shall include the following:

- Implement measures identified in Tier 1
- Implement measures identified in Tier 2
- Implement measures identified in Tier 3
- Control peak flows to not exceed pre-project flows for the 2-year through 10-year events..

Project Plans Shall include the following:

- Stormwater Control Plan
- Stormwater Control Plan Exhibit
- Stormwater Control Measure Sizing Calculator
- Operation & Maintenance Plan
- Drainage Calculations/Report
- Percolation Report (Infiltration rates)
- Soils Report
- Drainage Facilities Stormwater Maintenance Agreement