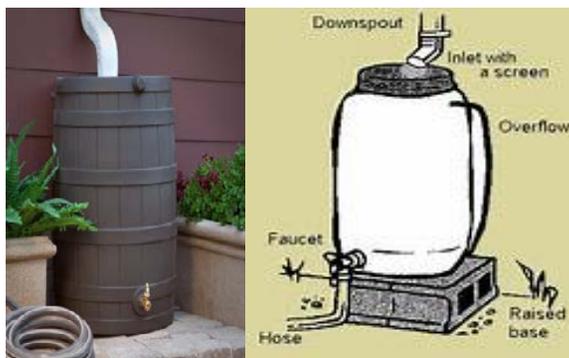


Required rain garden separations to different items are included in the Indirect Infiltration Practices Column below:

| Recommended Design Standards                     | Direct Infiltration Practices <sup>(a)</sup>  | Indirect Infiltration Practices <sup>(b)</sup>             |
|--|---|--|
| Allowable Infiltration Rates                     | Min 1.0 in/hr<br>Max 3.0 in/hr <sup>(c)</sup> | Min 0.5 in/hr <sup>(d)</sup><br>Max 3.0 in/hr              |
| Standing Water <sup>(e)</sup>                    | < 72 hrs                                      | < 72 hrs   |
| Groundwater Separation                           | ≥ 10 ft                                       | ≥ 5 ft   |
| Bedrock Separation                               | ≥ 10 ft                                       | ≥ 5 ft   |
| Water Well Setback                               | ≥ 150 ft                                      | ≥ 100 ft <sup>(f)</sup>                                    |
| Surface Water Setback                            | ≥ 100 ft                                      | ≥ 50 ft <sup>(f)</sup>                                     |
| Septic System Setback <sup>(g)</sup>             | ≥ 150 ft                                      | ≥ 100 ft <sup>(f)</sup>                                    |
| Groundwater Contamination Setback <sup>(h)</sup> | ≥ 500 ft                                      | ≥ 500 ft <sup>(f)</sup>                                    |
| Underground Fuel Tank Setback <sup>(i)</sup>     | ≥ 500 ft <sup>(j)</sup>                       | ≥ 500 ft <sup>(f)(i)</sup>                                 |
| Building and Bridge Foundation Setback           | ≥ 100 ft up slope and<br>≥ 20 ft down slope   | ≥ 100 ft up slope and<br>≥ 20 ft down slope <sup>(k)</sup> |
| High Use Roadway Setback <sup>(k)</sup>          | Prohibited                                    | ≥ 20 ft  |
| Basement and Crawl Space Setback                 | ≥ 100 ft up slope and<br>≥ 20 ft down slope   | ≥ 100 ft up slope and<br>≥ 20 ft down slope                |
| Property Line Setback <sup>(l)</sup>             | ≥ 5 ft  | ≥ 5 ft   |
| Slope Setback <sup>(m)</sup>                     | 100 ft from the top of slopes >15%            | 50 ft from the top of slopes >15%                          |

✓ **Cistern (Large Tank)/Rain Barrel-Store stormwater for use in irrigation or grey water systems. During the rainy season sufficient water can be captured to irrigate your landscaping or wash down your artificial turf if pets are present (artificial turf suppliers normally will have pet friendly options). Even a heavy drizzle during the dry season can provide you with irrigation water if your roof and gutter system is clean.**



Rain Barrel Installation and Schematic Installation

**Sizing Requirements**

**For Cisterns**

- ✓ Tanks shall be sized to drain in 48 to 72 hours over a landscaped area equal to at least 25% of the impervious tributary area.
- ✓ Outflow from the tanks shall be distributed relatively uniformly over the receiving pervious area over the drawdown period.
- ✓ Tanks shall be placed on level pads.
- ✓ Tanks located within 10 feet of the structure need to be restrained to prevent damage in the event of an earthquake.

**For Rain Barrels**

- ✓ Commercially manufactured rain barrels shall be installed per manufacturer’s recommendations and sizes vary. See example above for guidance.

For more information about SWDS compliance or additional pamphlets, call: (831) 758-7251, City of Salinas, Permit Center- Engineering Division

To Report a Spill, Illegal Dumping or a Clogged Storm Drain Call: (831) 758-7233, City of Salinas, Department of Public Works, Maintenance Division

*This is one in a series of pamphlets describing storm water Permit compliance measures. Available pamphlets concerning stormwater protection Best Management Practices can be found at: [http://www.ci.salinas.ca.us/services/engineering/planning/permit\\_forms.cfm](http://www.ci.salinas.ca.us/services/engineering/planning/permit_forms.cfm)*

**Salinas Stormwater Development Standards (SWDS) Compliance: Replacing Lawns and Pools and Reconstructing Landscaping**



**A Salinas SWDS Guide for:**

- Property Owners
- Landscapers
- Contractors



**City of Salinas  
Permit Center  
65 West Alisal St., Suite 101  
Salinas, California 93901  
(831) 758-7251**

Mandatory potable water use reduction has become the norm for California. This has led to property owners desiring to remove and replace managed turf/lawn, swimming pools and other high water use landscaping/structures.

**Is a Permit Required???**

- ✓ If the amount of surface area replaced is 2,000 square feet or more and consists of new impervious surfaces (normal concrete, pavers on concrete, asphalt, grouted pavers or similar that won't allow the rain water to soak into the ground).
- ✓ and/or results in 50 or more cubic yards of material (earth etc.) being moved.

a grading permit is required from the Salinas Permit Center to ensure compliance with the Salinas Stormwater Development Standards (SWDS).

If your project is under 2,000 square feet of new impervious surfaces and under 50 cubic yards of material moved you are still required to provide construction Best Management Practices such as dust and trash control and preventing materials from contaminating storm runoff but a grading permit is not required.

Property owners are expected to follow the Salinas SWDS based on Low Impact Development principles which include but are not limited to:

- ✓ Minimizing non-porous hard (impervious) surfaces, directly connected impervious surfaces (i.e. roof drains to the street gutter) and treat stormwater runoff by incorporating Post-Construction Best Management Practices (PCBMPs) to collect, detain and infiltrate runoff into the ground.
- ✓ Designing efficient landscaping to reduce landscape water runoff, irrigation runoff and promote water soaking into the ground (infiltration).

Permit Center Engineering staff will assist those who are unsure which requirements must be met.

**What Can I Install Instead???**

Suitable surface replacements for turf/pools can take many forms. The intent is to avoid placement of new impervious materials such as normal concrete or asphalt. New impervious areas increase stormwater runoff and can negatively impact your neighbors if runoff is directed anywhere but to the street.

The City recommends property owners provide one of the following designs for replacement:

- ✓ Permeable/pervious concrete or asphalt, pervious pavers, turf block, pavers with gaps and underlying permeable materials, gravel, crushed rock or similar pervious/permeable surfaces (see City Standard Plan SW-11 for Permeable Pavement-see your local material supplier for other suitable options).
- ✓ Raised decks which allow storm water to drip between the boards and onto the earth/permeable material underneath.
- ✓ Artificial turf with an underlying base of permeable material such as Caltrans Class 2 Permeable drain rock or gravel that allows the rain to soak into the ground beneath (check with the artificial turf manufacturer).

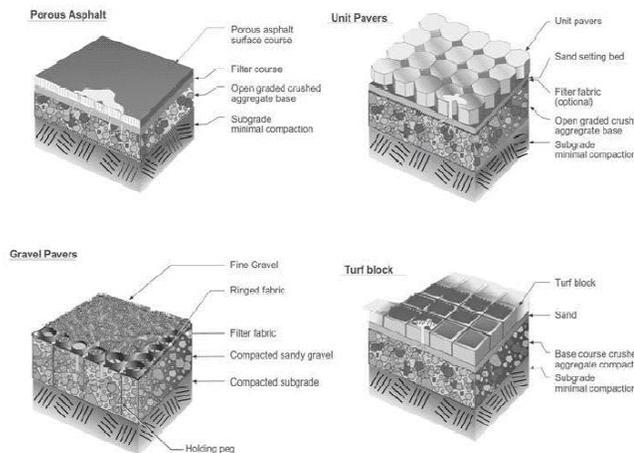


Open Stone Paving



Crushed Rock Landscaping

- ✓ Xeriscape/Low water use landscaping with drought tolerant species. Many landscape supply stores/plant nurseries will have a selection of drought tolerant plants for this purpose. They will either be marked as such or you can talk to your local gardening expert to get plant suggestions.
- ✓ Rain garden utilizing captured roof runoff which will provide irrigation water during the rainy season and add a greywater system to irrigate during the dry season. For general information on graywater systems see the following web link: <http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=45756> until Salinas generates it's own web site.



Permeable/Pervious Pavements/Hardscapes

