Erosion Prevention and Sediment Control (EPSC) Plans For Small Development



Standard EPSC Plans

City of Salem, Oregon

Erosion Prevention and Sediment Control Plans For Small Development Handout

GOAL STATEMENT: To provide small development builders and contractors with standard

EPSC plans and specifications for their use and implementation on new construction projects within the City of Salem.

1.0 Introduction

Each year tons of sediment are washed and blown from construction sites into municipal storm drainage systems, local streams, rivers, wetlands, and lakes. Eroded materials clog streets, storm drains, culverts, stream channels and cause private property damage. It is a major source of pollution to these water bodies which causes degradation of fish and wildlife habitat and water quality with the cleanup burden placed on ratepayers of the City. All of this could largely be avoided through the use of adequate erosion prevention and sediment control best management practices (BMPs).

The City is mandated by the Environmental Protection Agency (EPA) and the Oregon Department of Environmental Quality (ODEQ) through a Municipal Separate Storm Sewer System (MS4) Discharge Permit to reduce pollutant loads to the maximum extent practicable.

This Handout provides information for applicants and permit holders need to follow in order to comply with Salem Revised Code (SRC) Chapter 75.

2.0 Plan and Permitting Requirements

For all projects disturbing a total of 1,000 square feet of ground or larger, an Erosion Prevention and Sediment Control (EPSC) plan is required with the permit application. Projects which disturb 10,000 square feet of ground or less are considered small development sites and do not require the stamp or signature of a Certified Professional. Large development sites are required to have an EC plan prepared and stamped and signed by a Certified Professional.

2.1 Small Development Sites

The City has prepared three standard Erosion Control (EC) plans labeled EPSC-S1, S2, and S3 (see attached), that applicants may select and use as their project plan based upon the topography of their site. Use of EPSC-S1, S2, or S3 allows for an over the counter approval and immediate issuance of the EC permit.

A blank plan, EPSC-S4, is also attached if a permit applicant would like to propose an alternative plan for review and approval. Additional information and design requirements can be found in City of Salem Design Standards, Division 007 Appendix C—EPSC Plans for Single-Family Residential.

3.0 Recommended Erosion Prevention and Sediment Control Measures

The site owner/developer through the EC permit holder is responsible for seeing that BMPs are properly installed, satisfactorily maintained, and working as designed. An approved erosion control plan does not waive their responsibility for ensuring that erosion control is achieved. If an installed erosion control system does not adequately contain sediment on site, then the BMPs must be field adjusted as necessary by the permit holder to the satisfaction of the City.

EPSC BMPs are required on disturbed areas until permanent site ground covers are in place and accepted by the City. As further detailed in Sections 3.1 and 3.2, certain base BMPs are required for construction sites at all times of the year. Also, additional ground cover and/or filtration measures are required during the wet weather season, October 15 through April 30.

3.1 Timing of Installations

Erosion prevention and sediment control measures are required to be installed before any ground disturbing activities occur. These activities include, but are not limited to, saw cutting, clearing, grading, fills, excavations, and any other ground disturbance and/or construction activities.

Disturbed areas which have not been actively worked within the past 14 calendar days are required to be stabilized with applicable BMPs. During the wet weather season, the following additional items are also required:

- A. Stockpiles shall be fully covered with secured plastic sheeting or two inches of straw much, and isolated with sediment control BMPs at the end of each day.
- B. Exposed soil shall be covered with appropriate soil stabilization BMPs when no work is planned for a period of 48 hours or greater, or if rainfall is forecasted within the next 24 hours.
- C. Exposed soil not planned for work until the following spring shall be stabilized with established grasses or other acceptable BMPs.

3.2 Erosion Control Matrix

Tables 3-1 presents recommended minimum BMPs for various site and construction types. Additional measures may be required based on specific site conditions.

BMPs are divided into two categories:

Base measures which are required for construction sites at all times while there
is disturbed or unstabilized ground surface on the site; and

• Supplementary wet weather measures which are required between October 15 and April 30 in addition to the base measures.

Table 3-1 Erosion Control Matrix for Small Development Sites

		Construction Site Disturbed Area		Stock
				Piles
		Slope <2%	Slope > 2%	
BASE MEASURES				
1.	Gravel Construction Entrance (Sec. 4.2.1)	В	В	
2.	Sediment Fence (Sec. 4.2.2)	В	В	В
3.	Sidewalk Subgrade Crushed Rock Barrier			
	(Site slopes to street at <5% grade)			
	(Sec. 4.2.4)	A (2.)	A (2.)	
4.	Undisturbed Vegetative Buffer			
	(Site slopes <10%) (Sec. 4.2.5)		A (2.)	
5.	Storm Drain Inlet Protection Barrier			
	(Sec. 4.2.12)	В	В	В
6.	Concrete Management Facility (Sec. TBD)	В	В	
WET WEATHER MEASURES				
7.	6-mil plastic sheet cover (Sec. 4.2.9)			S
8.	2" minimum straw mulch cover (Sec. 4.2.7)	S	S	AW
	POST CONSTRUCTION			
9.	Re-establish permanent ground cover or			
	landscape prior to removing erosion			
	measures (Sec. 4.2.6)	В	В	
V ₀				

Key:

B = Base Measure

A = Alternate to Base Measure Indicated in Parenthesis

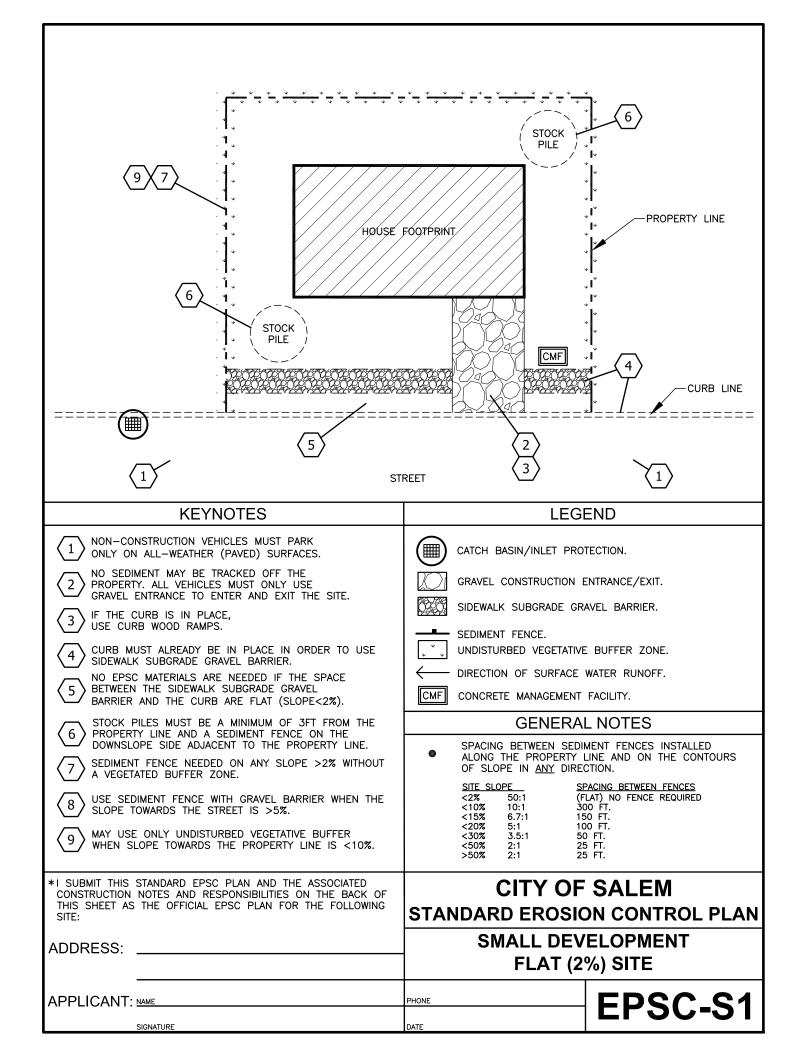
S = Supplemental Wet Weather Measure (October 15—April 30)

AW = Alternate Wet Weather Measure to 6

4.0 Best Management Practices (BMPs)

Applicants and Permit holders should review the following references concerning BMPs

- City of Salem *Erosion Prevention and Sediment Control (EPSC) Plan Technical Guidance Handbook* found online at the following website:
 - http://www.cityofsalem.net/Departments/PublicWorks/MidWillamette% 20Erosion%20Control%20Summit/Salem%20EPSCP%20Handbook.pdf
- ACWA Construction Site Stormwater Guide Illustrated Best Management Practices available online at the following website:
 - http://www.oracwa.org/documents/ACWASWSiteGuide0313w.pdf

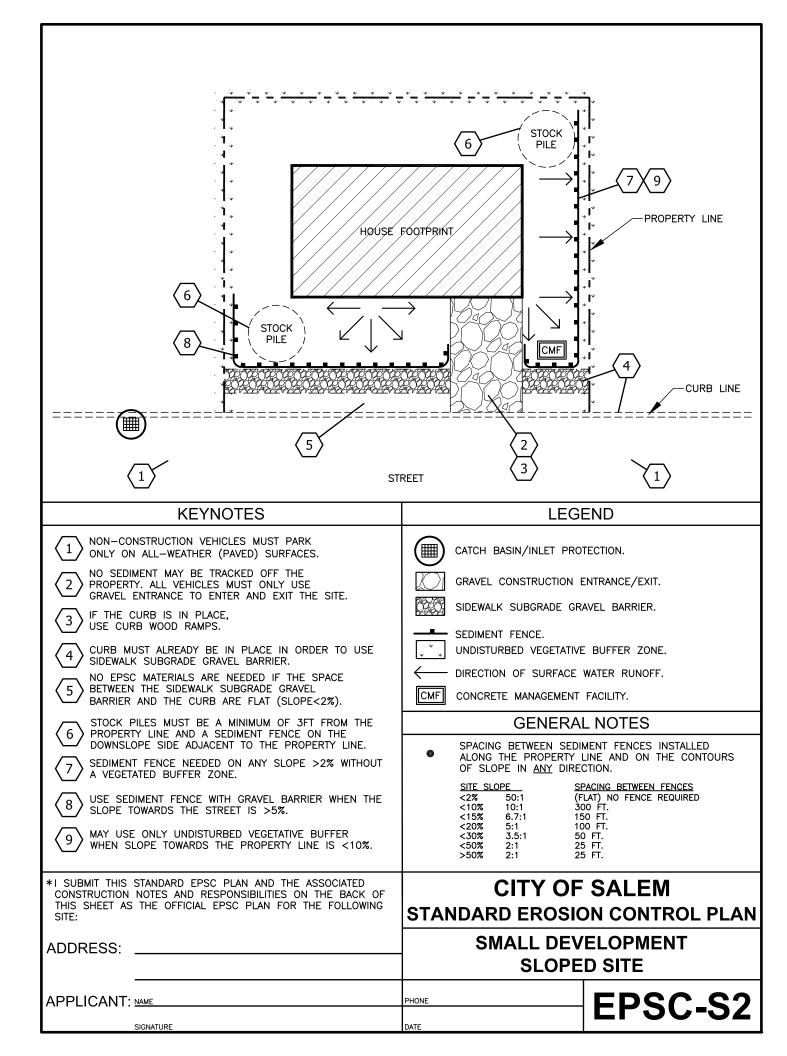


- 1. All sediment is required to stay on the site.
- 2. Prior to any land disturbing activities a minimum of the following Best Management Practices (BMP)s shall be installed to control erosion on the site: Construction entrance; perimeter sediment control; inlet protection. Catch basin inlet protection is required on the first downstream catch basin and any adjacent catch basins.
- 3. Additional BMPs shall be installed prior to activities which necessitate their use. If current methods and BMPs are insufficient, implement additional EPSC measures to adequately control sediment from leaving the site.
- 4. Applicant or designee shall inspect EPSC BMPs after each rainfall event or daily during extended rainfall. Record inspection results and actions taken in a log for review upon request by City Inspector. Make any required repairs, relocations, or additions as necessary.
- 5. An undisturbed vegetated buffer is either an undisturbed grassed area or is covered with dense vegetation. Limit vegetation removal to minimize disturbed land area and prevent erosion.
- 6. A sidewalk is assumed to be part of the site plan. If a sidewalk is not planned for the site, a Sediment Fence or other approved BMP shall be used in place of the Sidewalk Subgrade Gravel Barrier.
- 7. A Concrete Management Facility (CMF) BMP shall be provided for all concrete used on this site.
- 8. Permanent vegetation or native vegetation should be established prior to October 15 and before removing EPSC BMPs. Temporary BMPs shall be maintained until permanent restoration is achieved.
- 9. If construction occurs during the Wet Weather Season (October 15 to April 30), temporary stabilization, including covering of bare soils with approved BMPs, must be installed at the end of each workday, and before a holiday or weekend if rainfall is forecast in the next 24 hours.

Maintenance:

- 1. Remove sediment buildup on fences. No more than 1-foot of sediment shall be allowed to accumulate against sediment fences.
- 2. Inspect catch basin inserts daily on active sites. Remove sediment accumulation when clogged or if accumulated sediment is greater than 1-foot in depth. Replace catch basin inserts as necessary if damaged of functioning improperly.
- 3. Remove accumulated sediment and add gravel for all types of gravel barriers.
- 4. Remove dried accumulated, Concrete Management Facility debris as needed and completely remove prior to project completion.
- 5. Sediment found offsite shall be cleaned throughout each day by sweeping or shoveling. Flushing of sediment is not allowed.

- 1. For BMP information, see the following documents: ACWA Construction Site Stormwater Guide, Illustrated Best Management Practices, 2013; City of Salem Erosion Prevention and Sediment Control (EPSC) Plan Technical Guidance Handbook.
- 2. For inspections call Public Works Dispatch at 503-588-6333.

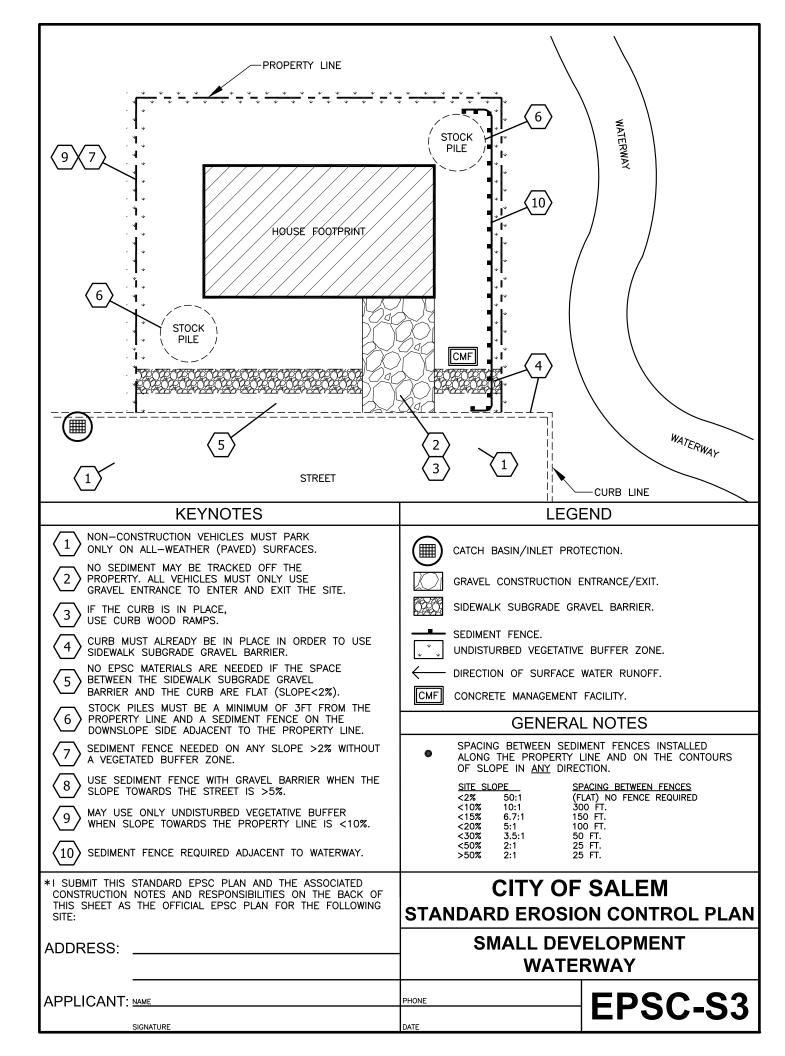


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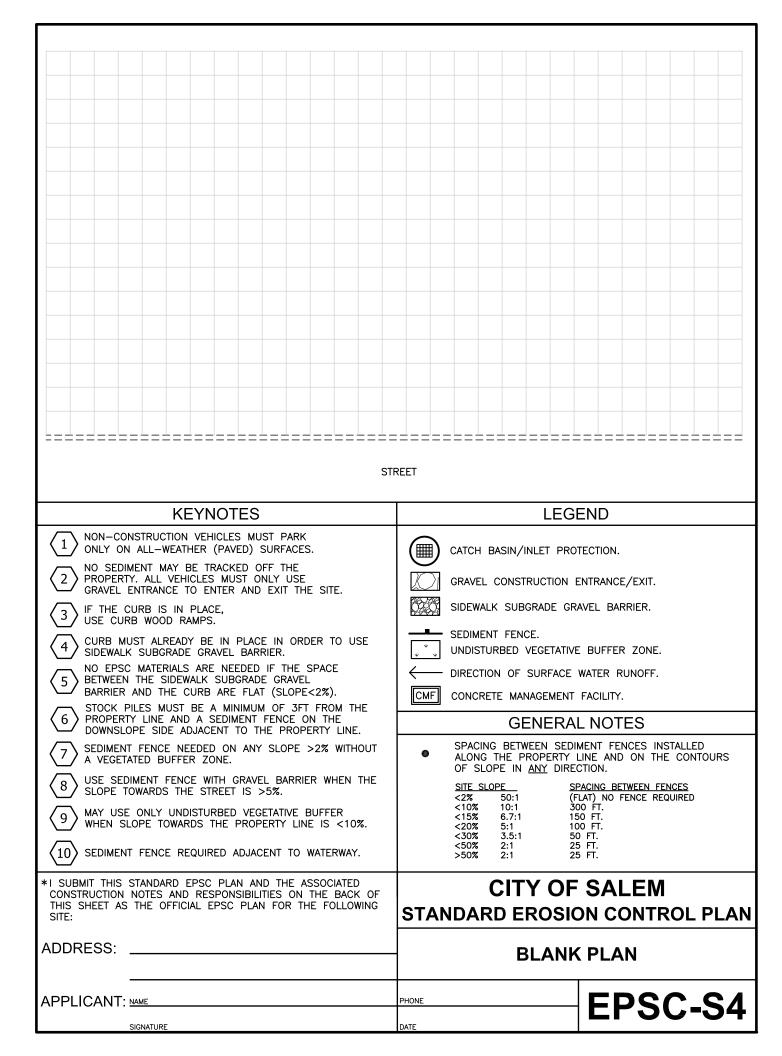


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