



# Single Family & Duplex Residential Development

## Best Management Practices

Best Management Practices (BMPs) typically include but are not limited to:

- silt fence
- filter socks
- straw mat
- seed
- mulch
- inlet protection
- temporary construction entrance

If slopes are steep and stormwater drains directly to waters of the State, other measures such as check dams may be necessary to keep sediment on-site. See individual BMPs for proper installation methods.

## Installation Sequencing

It is recommended that installation of BMPs follow the sequence below:

- 1) Inlet Protection - Ensure that BMPs are in place and functioning for both area inlets and curb inlets along the street frontage, adjacent and down the street as needed. **Some form of temporary inlet protection may encroach onto access roads, streets, parking lots, driveways or highway traffic. Modify designs to allow for emergency overflow or bypass for heavy rain, which may endanger traffic or cause property damage.**
- 2) Protection of Adjacent Lots - Install BMPs along the common lot line of adjacent sodded or seeded lots, especially for down slope lots.
- 3) Grading/Excavating - Install all BMPs prior to any grading or excavating activities, where practical.
- 4) Stabilize Stockpiles - Install BMPs to stabilize stockpiles to prevent sediment from reaching the street, stormwater structures, or nearby water bodies and streams.
- 5) Install BMPs per Design - Complete installation of all sediment and erosion control BMPs per the specified design, or other engineered design.
- 6) Temporary Construction Entrance – Provide a gravel entrance to the site to minimize sediment transport onto roadways (see detail).
- 7) Maintenance - The builder is responsible for maintaining and repairing all BMPs as needed throughout construction, especially for lots associated with a Land Disturbance or Runoff Management Permit (See Section 2 Local Requirements), regardless of lot size.

- 8) Final Grading – Ensure that the site is stabilized with mulch, stone, vegetation, etc., at the completion of land disturbing activity. BMPs may be removed in order to complete final grading and sodding or seeding of the lot. If sodding of the lot is delayed, the contractor is required to maintain BMPs until the sod can be put down.

## Maintenance

The contractor or property owner is responsible for the on-going maintenance of all lot specific erosion and sediment control devices.

Periodic inspection shall be frequent to ensure that erosion and sediment control measures are functioning as designed. In addition to standard periodic inspections, it's required that an inspection of all BMPs be conducted weekly and after each rain event of 1/2" or more in a 24-hour period. Any problems noted during these inspections shall be corrected immediately.

Once construction has commenced, the contractor and property owner are responsible for the maintenance of erosion and sediment control measures protecting area inlets on their lots, as well as curb inlets along the street frontage. It is critical that sediment not be allowed to enter the street or drainage system.

The temporary construction entrance provides a place for parking vehicles off-street and a spot where material can be off-loaded. This requirement ensures that a stable surface for parking vehicles is provided and mud and other debris will not be tracked onto the street. Proper maintenance of the area is required until such time as a permanent driveway is installed. During the entire construction process, the contractor and property owner are responsible to ensure that mud, dirt, rocks, and other debris are not allowed to erode onto streets and sidewalks nor tracked onto the streets by construction vehicles. Should any mud or other debris discharge into the street, the contractor shall take immediate steps to have it removed daily.

If the utilities are installed after BMPs are in place, the contractor and property owner are responsible for control of erosion and sediment during the utility construction process and they are responsible to ensure that all BMP devices are reinstalled per the original design.

### **Maintenance of Silt Fence and Filter Socks**

Inspect silt fences, filter socks, and other BMPs at least once a week and after each rainfall = ½ inch. Make needed repairs immediately.

If the silt fences or filter socks collapse, tear, decompose, or become ineffective, replace promptly.

Remove the sediment deposits as necessary to provide adequate storage volume for the next rain and to reduce pressure on the silt fence or filter sock. Take care to avoid damaging or undermining the silt fence during cleanout.

## References

Overland (City of), Kansas. January 2004. Planning and Development Services Department. Single Family Residential Erosion/Sediment Control Standards.

Photo 1  
Compost Filter Sock Used for Inlet Protection



Figure 1  
Single Family Lot Erosion Control Plan - Type A

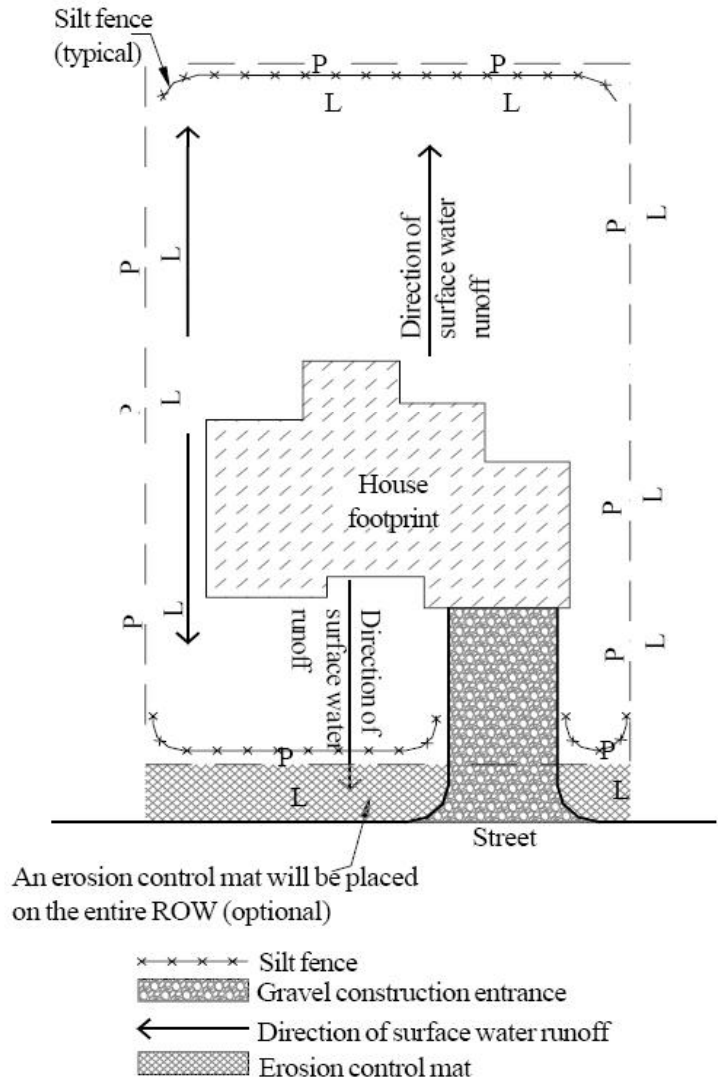


Figure 2  
Single Family Lot Erosion Control Plan - Type B

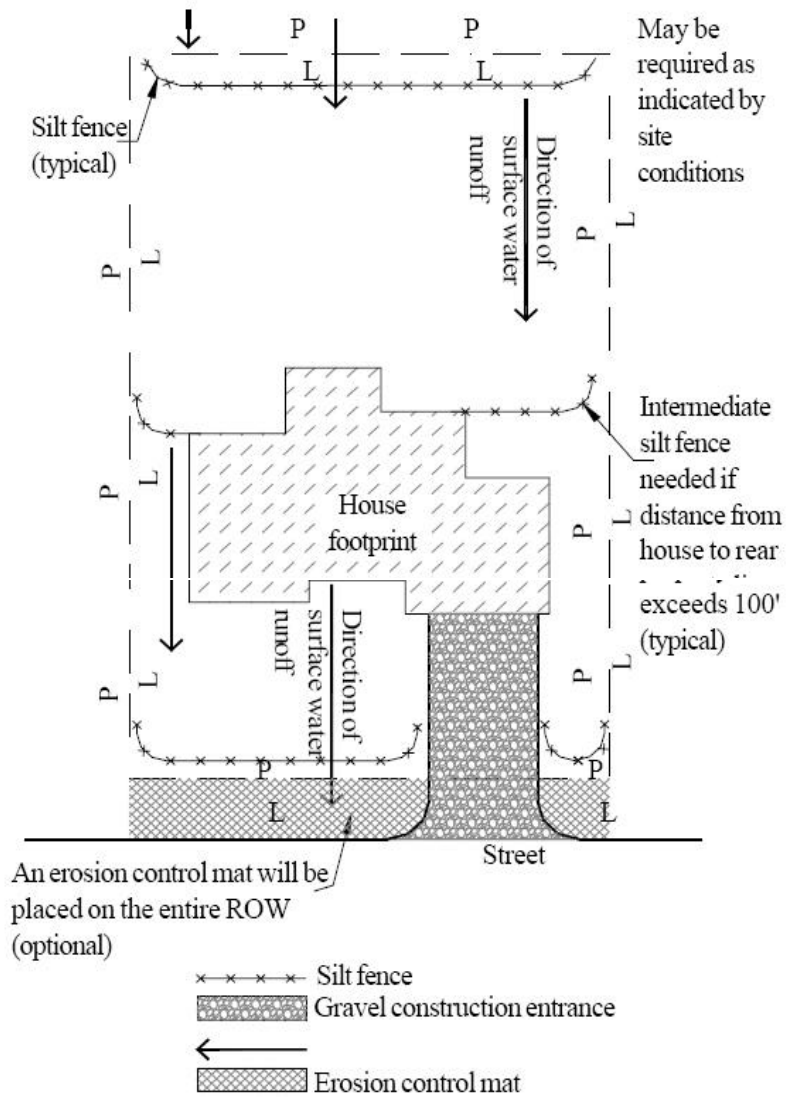


Figure 3  
Single Family Lot Erosion Control Plan - Type C

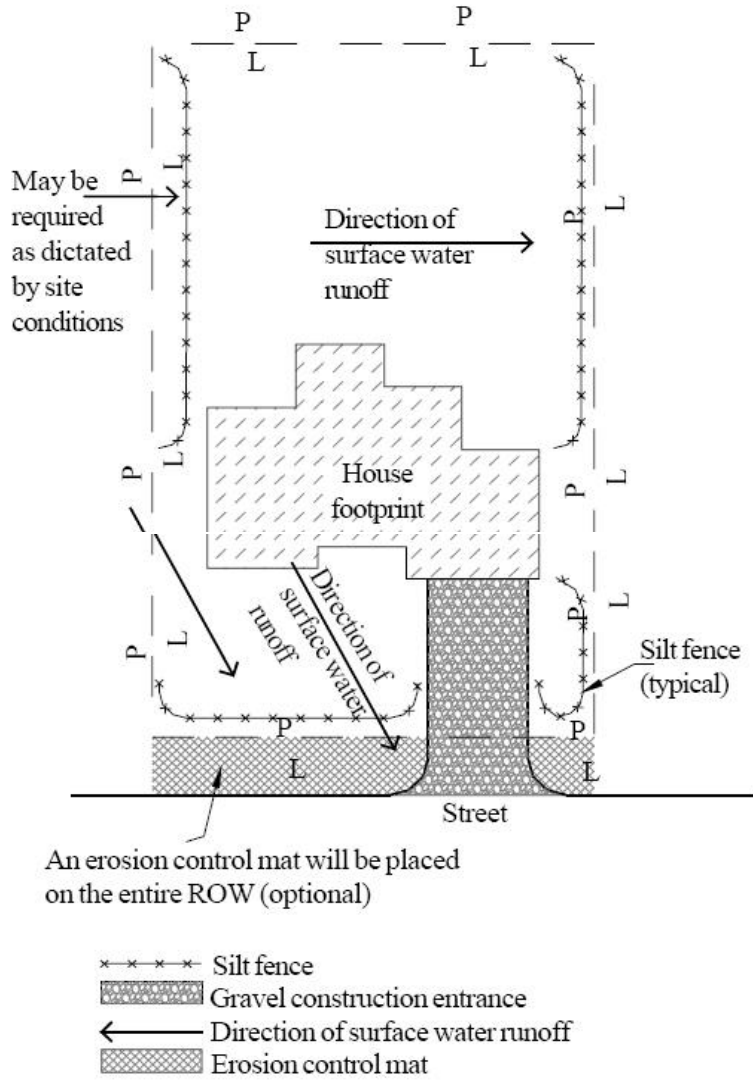
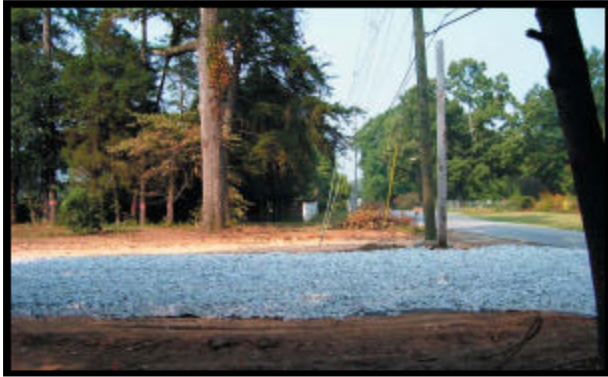


Figure 4  
Erosion Control for Home Builders

## DO's



Construction entrance with Geotextile liner & 2"-3" stone



Perimeter silt fence with stabilization



Park in the street to avoid tracking

## DON'Ts



Poor construction entrance with 1/2" stone & tracking



No silt fence causes tracking and erosion



Parking on site damages property and tracks streets