

Landscape Installation and Erosion and Sediment Control

Description

Minimize erosion and control sediment leaving the construction site during landscape installation.

Basic Practice Guidelines

Erosion and Sediment Control/Site Protection

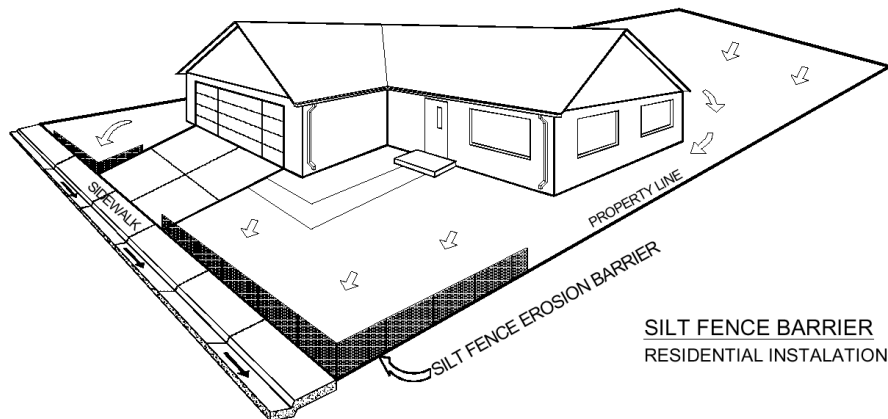
1. During construction, protect drainageways from runoff from exposed areas. Applicable practices may include straw bales, silt fences, berms, check dams, sediment basins, etc. See Appendix A for more detail on these measures.
2. Be aware of, and comply with, all stormwater construction permit requirements. As of July 1, 2002, most construction sites disturbing 1 acre or more will require such a permit and corresponding stormwater and erosion and sediment control plans. Coordinate with the General Contractor to ensure that applicable provisions of the permit are followed.
3. Minimize the amount of exposed land area and duration of exposure by phasing construction and landscape installation.
4. Avoid storing topsoil or soil amendments delivered to the site on the street or in the gutter. Dry-sweep residual soil into a wheelbarrow and dispose of it appropriately rather than using a hose to wash residual material into the storm sewer system.
5. During construction, store and protect topsoil for later use. This may require covering the stockpiled soil, and typically requires berms around the stockpile to prevent the soil from washing away during storm events.
6. Roughen slopes to be planted and provide a convex shape to slow water runoff. Apply mulches or netting over seeded slopes in exposed conditions or with a slope of 3:1 or greater to prevent erosion. Slope stabilization should be completed at the earliest practical time and in accordance with the timeframes specified by local regulations (e.g., 14 to 30 days).
7. Protect the root zone of existing trees to be retained on the site. Clearly delineate root zones with protective fencing and by posting “keep out” signs. Maintain positive drainage to these areas and adequate irrigation during and following construction. Grading and trenching in the critical root zone should be avoided.
8. Turfgrass sod provides excellent erosion and sediment control benefits and should be installed as soon as possible in areas where sediment runoff is likely. Temporary cover crops and other groundcovers may also be installed to protect these areas.
9. Repair and stabilize areas of excessive erosion.

BMP Type			
Design			
Installation		X	
Maintenance/Operations			
Green Industry Relevance			
ASLA	X	GCC	
ALCC	X	ISA	X
CALCP	X	RMSGGA	X
CGGA		WFC	
CNA	X		

10. Properly handle, store and dispose of pesticides, fertilizers, equipment maintenance products (e.g., oil, fuel) and other waste used during landscape installation. *(See the Chemical and Equipment Handling BMP for more detail.)*

Planting and Landscape Installation

11. Perform a comprehensive soil analysis and apply fertilizer and other amendments if specified. Slow-release type fertilizers should be used to reduce weed growth and protect water quality.
12. Properly amend soil prior to planting or laying sod. This typically requires 3 to 5 cubic yards (1 to 3 inches) of organic material per 1,000 square feet of the site. If the site has been compacted, tilling to a depth of approximately 4 to 6 inches or more is also recommended. Proper soil preparation can substantially reduce irrigation requirements.
13. For landscape areas being started from seed, sow seed mixtures at the proper time of year specified for the mixture.
14. Mulch all seeded areas and adequately secure the mulch. Maintain mulch by adding and redistributing, as necessary.
15. Keep all containerized nursery stock in a live and healthy condition prior to installation.
16. Provide adequate irrigation during the vegetation establishment period.
17. Routinely inspect landscapes following planting to implement follow-up measures to increase success. Immediate attention to a problem (e.g., weed infestation, failure of seed to germinate) can prevent total failure later.



Proper placement of residential erosion control barriers.

Source: Urban Drainage and Flood Control District (1999) and City of Broomfield.

Regional Considerations or Industry Adaptations

1. As a rule of thumb along the Front Range and in the mountains, the latter part of May and first part of June typically experience frequent storm events. During this time, landscapers should be particularly aware of the impact of the weather and phase construction/installation accordingly.

Key References

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- City and County of Denver. 2000. *Denver Landscape Design and Maintenance Guidelines for Water Conservation on City Owned and Operated Properties*. Denver, CO: City.
- Colorado Department of Public Health and Environment, Water Quality Control Division. 2001. *Colorado's Phase II Municipal Guidance*. Denver, CO: CWQCD.
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