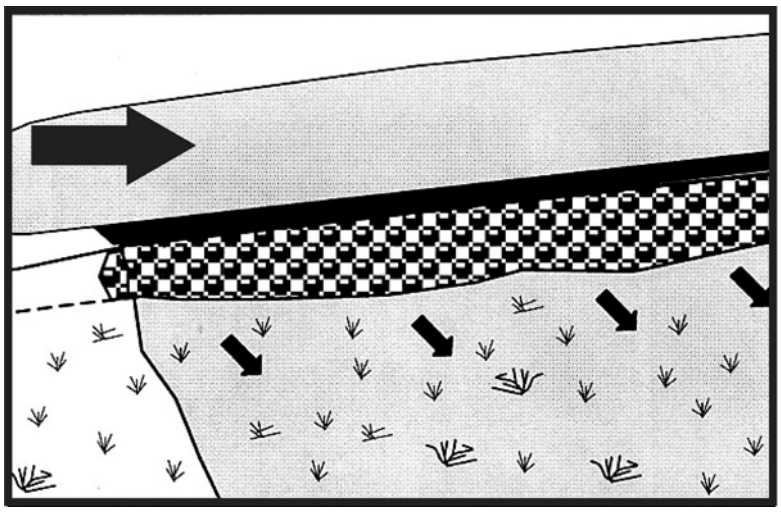
Level Spreader SC-10



Source: Knoxville BMP Manual, 2003.

Description

A device used at outlets that converts concentrated flow to sheet flow preventing erosion of the receiving area. Tops of channels, earthen berms, or rigid weir-like structures may function as level spreaders.

Applications

- Flat or gentle sloping areas.
- Outlets for dikes and diversions.

Installation and Implementation Requirements

- Construct on undisturbed soil.
- Do not construct on fill material.
- Locate where re-concentration of water will not occur.
- A stabilized and well vegetated slope of less than 10% shall be located below the level spreader.
- Filter runoff containing high sediment loads through a sediment-trapping device prior to release to the level spreader.
- Incorporate a rigid outlet lip design for high discharge flows.
- Zero percent grade on the spreader lip is necessary for uniform sheetflow.
- Avoid operating vehicles and heavy equipment on the level spreader to maintain a smooth level surface for the overflow weir.

Limitations

Not applicable to sediment laden runoff.

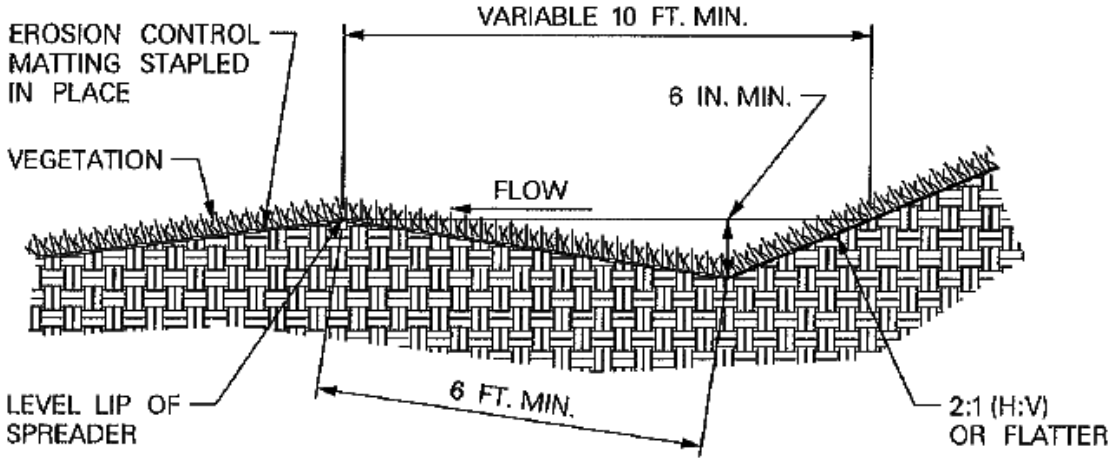
Inspections and Maintenance

- Conduct inspections of the level spreaders weekly during dry periods as well as within 24 hours of any rainfall of 0.5 inch or greater which occurs in a 24-hour period and daily during periods of prolonged rainfall.
- Inspect level spreader channel for accumulation of debris and

Inspections and Maintenance (Continued)

sediment regularly and remove debris and sediment.

- Verify a slope of zero percent along the spreader lip.
- Inspect the discharge area for signs of erosion or concentrated flow.



TYPICAL LEVEL SPREADER WITH VEGETATED LIP

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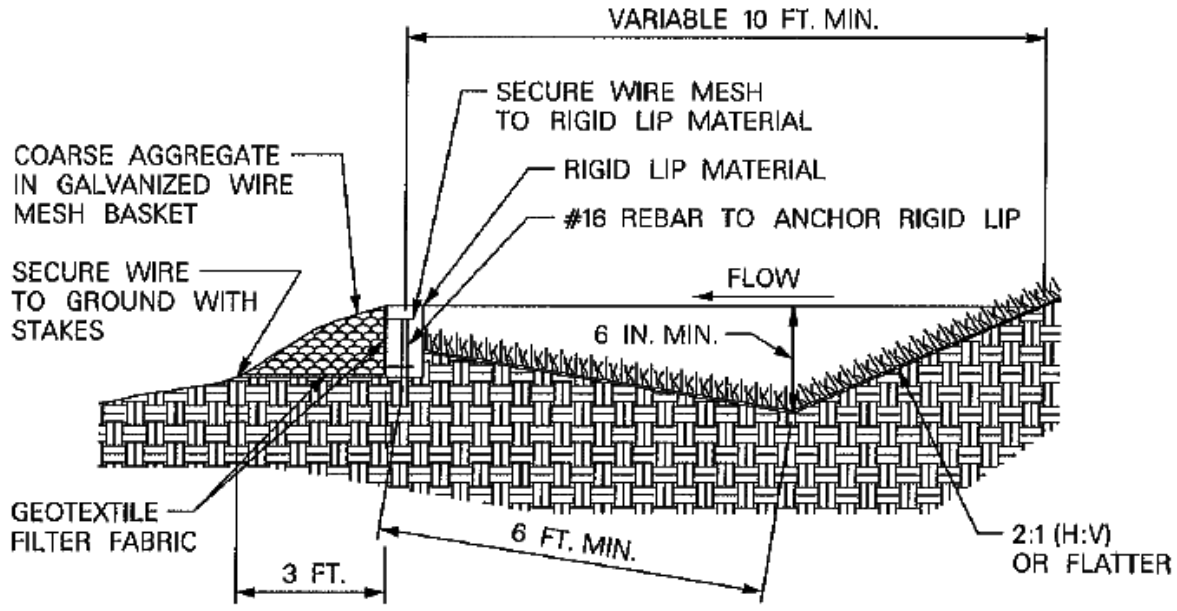

TYPICAL LEVEL SPREADER WITH RIGID LIP

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Source: HDOT Storm Water Management Plan, Oahu District, 2003.