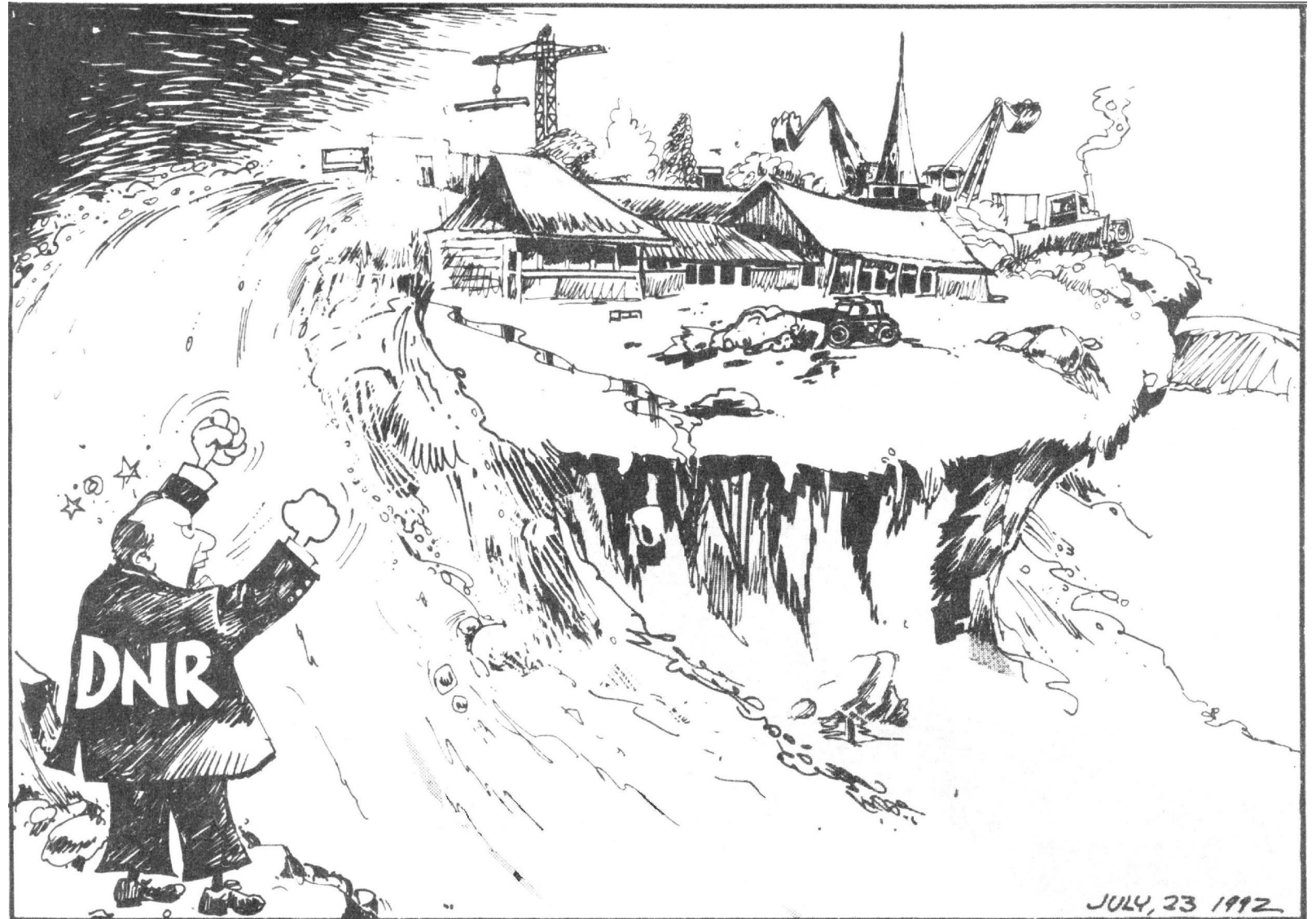


# DNR Storm Water Program Updates

# Topics

- Guidance
  - Solar SW
  - MS4 Swale
  - SW Modeling
- Tech Standards
  - Perimeter Control
  - Dry Ponds
  - Sand Filters
  - Enhanced Phosphorus
  - Infiltration Site Evaluation
  - HDD



# Post-Construction Storm Water for Solar Projects

- Guidance available soon
- Webinar April 20th
- Deep rooted vegetation is primary BMP
- Aisle width criteria based on soil type



# MS4 Swale

- Guidance available later this year(?)
- Criteria for swales, dry basins and infiltration basins
- Increase minimum number of tests for swales
- Alternatives to double-ring infiltrometer?
  - <https://wrc.umn.edu/events/stormwater-infiltration>



# Post-Construction Modeling Guidance

- Guidance update in progress
- WinSLAMM 10.5
  - Biofilter input clarifications



# Perimeter Control

Silt  
Fence



Manufactured Perimeter  
Control & Slope  
Interruption

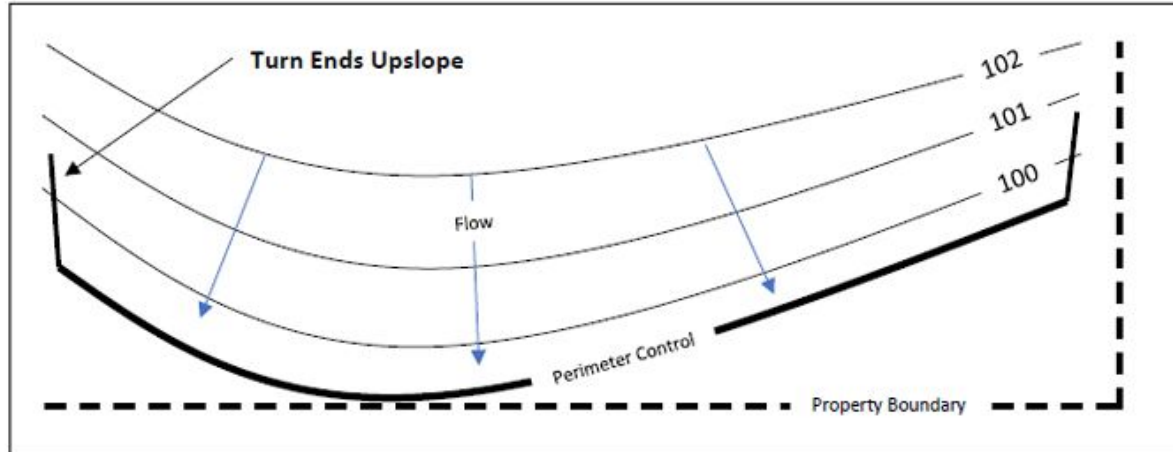


Perimeter Sediment  
Control & Slope  
Interruption



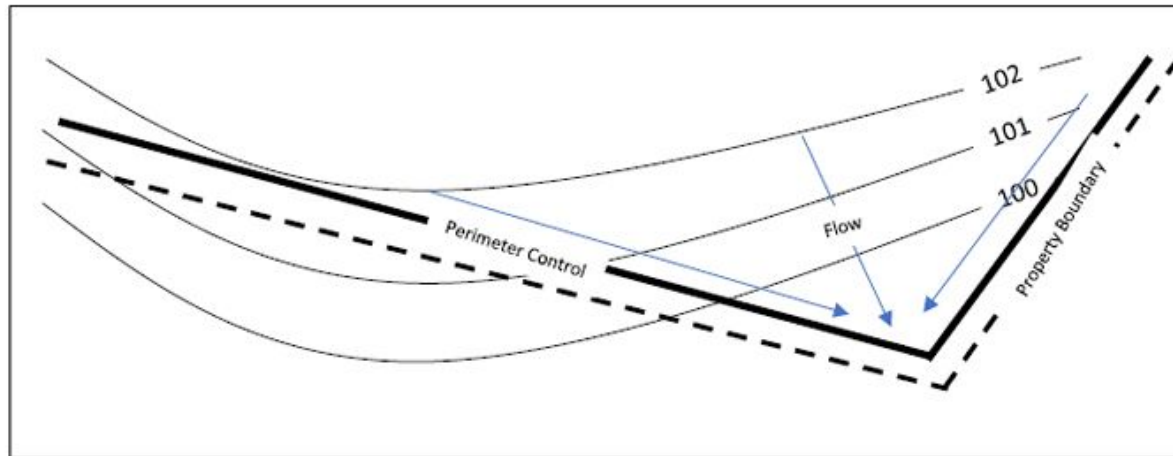
Table 1				
Average Slope		Slope Length	Maximum Contributing Drainage Area Per 100 Feet of Silt Fence	
(%)	(H:V)	(Feet)	(Square Feet)	(Acres)
<2	<50:1	100	10,000	0.23
2 to 5	50:1 to 20:1	75	7,500	0.17
5 to 10	20:1 to 10:1	50	5,000	0.11
10 to 33	10:1 to 3:1	25	2,500	0.06
33 to 50	3:1 to 2:1	20	2,000	0.05

**Figure 1:  
Placement on Contour**



**CORRECT PLACEMENT**

Install perimeter control on contour and turn the ends upslope. This will create the largest potential ponding area to maximize sediment removal efficiency.

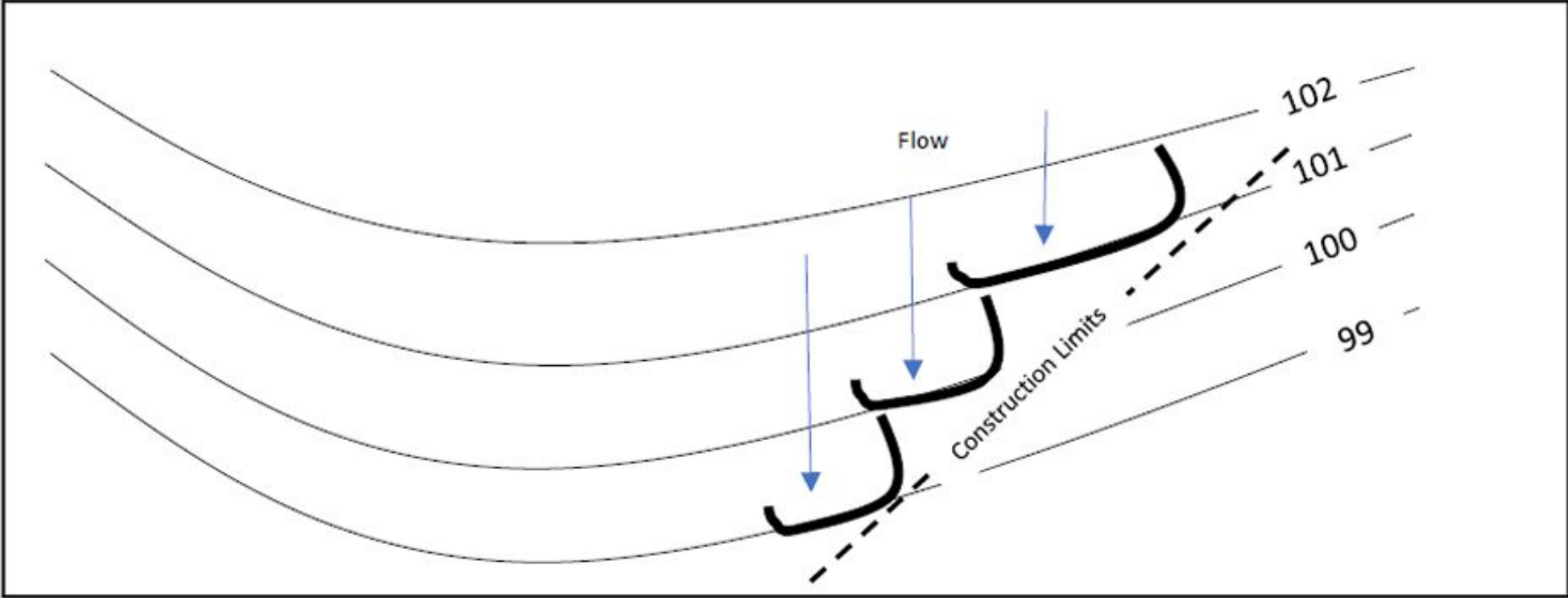


**INCORRECT PLACEMENT**

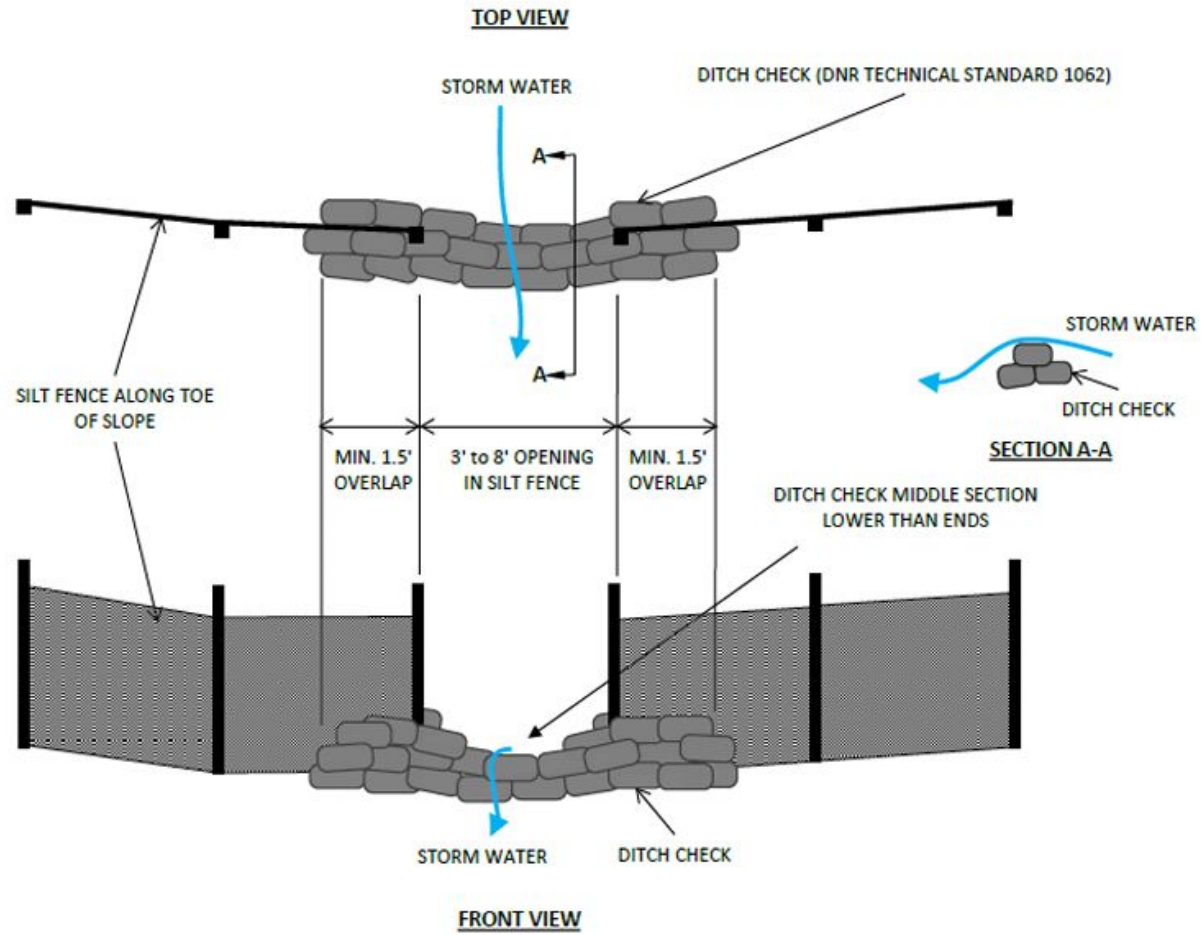
Do not install perimeter control along property boundaries, construction limits, roadways or other features that are not on contour. Installing perimeter control without regard to contour will cause runoff to concentrate at the low point and overwhelm the practice at this location.



**Figure 2:  
J-Hooks**



**Figure 3:  
Silt Fence Relief**



# Dry Ponds

- Available this summer or fall
- Two cell design
  - Forebay and extended dry detention similar to infiltration basin
- Modeling
  - Wet pond with seepage outlet



# Sand Filter

- Available this summer or fall
- Filter media for enhanced phosphorus removal (e.g., iron filings)



# Enhanced Phosphorus Removal

- Available?
- Options to enhance settling phosphorus removal in wet ponds through chemical treatment
- Continuous or episodic



# Site Evaluation for Infiltration

## QUALIFICATIONS

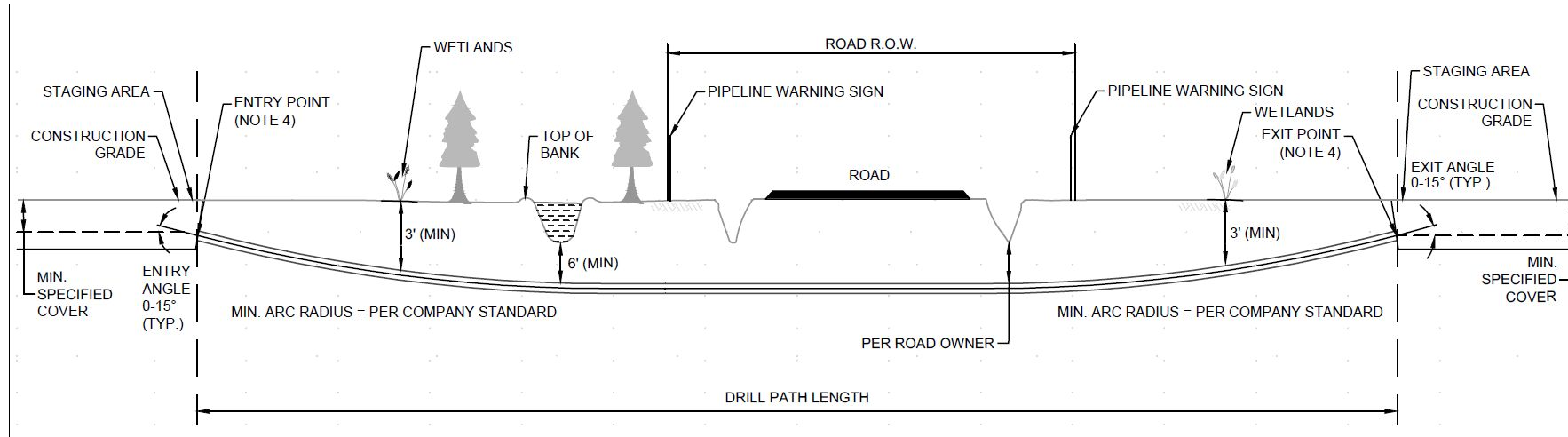
### Site Evaluation

Complete Steps A and B by a Licensed Professional with experience in soil investigations, interpretation, and classification acceptable to the authority having jurisdiction.

### Soil Evaluation

Complete Step C by a Licensed Professional Soil Scientist, or Licensed Professional Geologist as licensed by the Wisconsin Department of Safety and Professional Services (DSPS) with experience in soil investigations, interpretation, and classification or other licensed professional with 5 years of experience acceptable to the authority having jurisdiction.

# Horizontal Directional Drilling



- Plans to mitigate risks of inadvertent releases (IRs or frac-outs)
- Different levels of plan detail required based on diameter and length
- Convenience drills & service laterals exempt (max. 6-in diameter, 200-ft length)

# CONNECT WITH US

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"WILD WISCONSIN:  
OFF THE RECORD"