

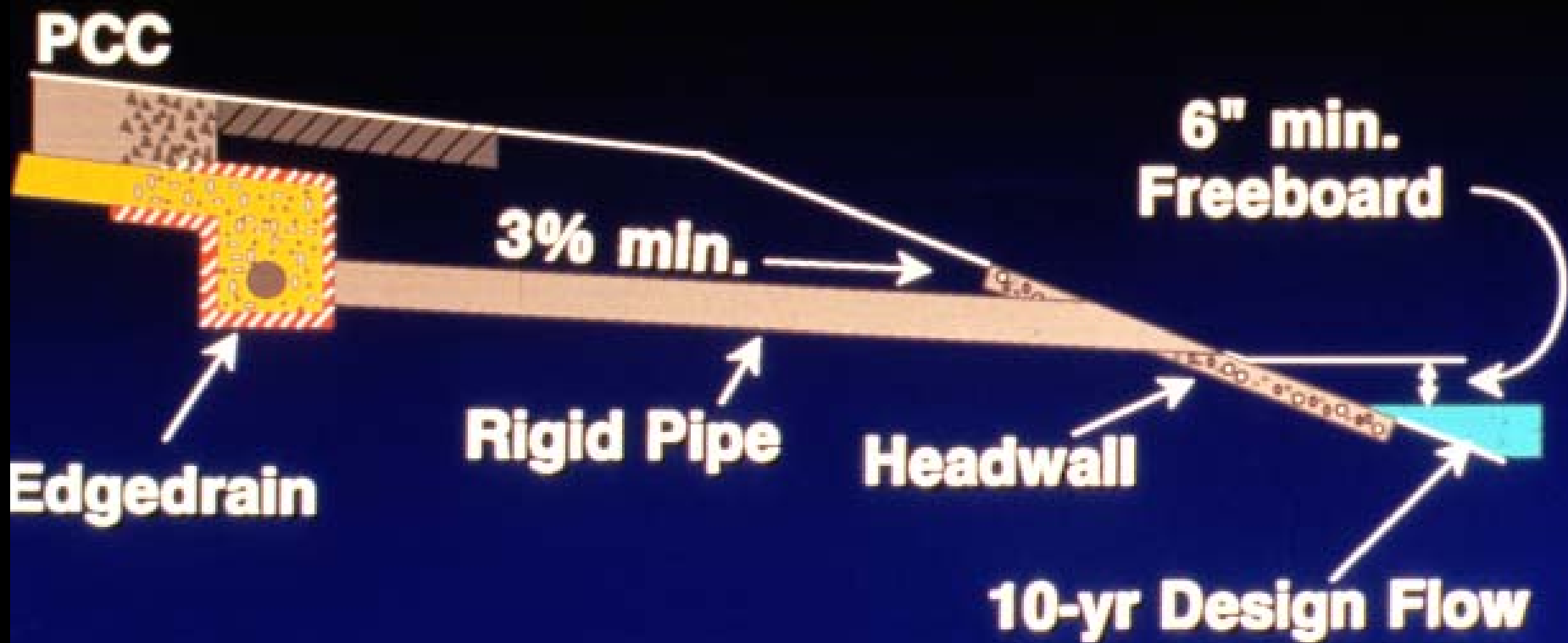


**DRAINAGE !**

To Drain or not to  
Drain  
That is a Hellava  
Question



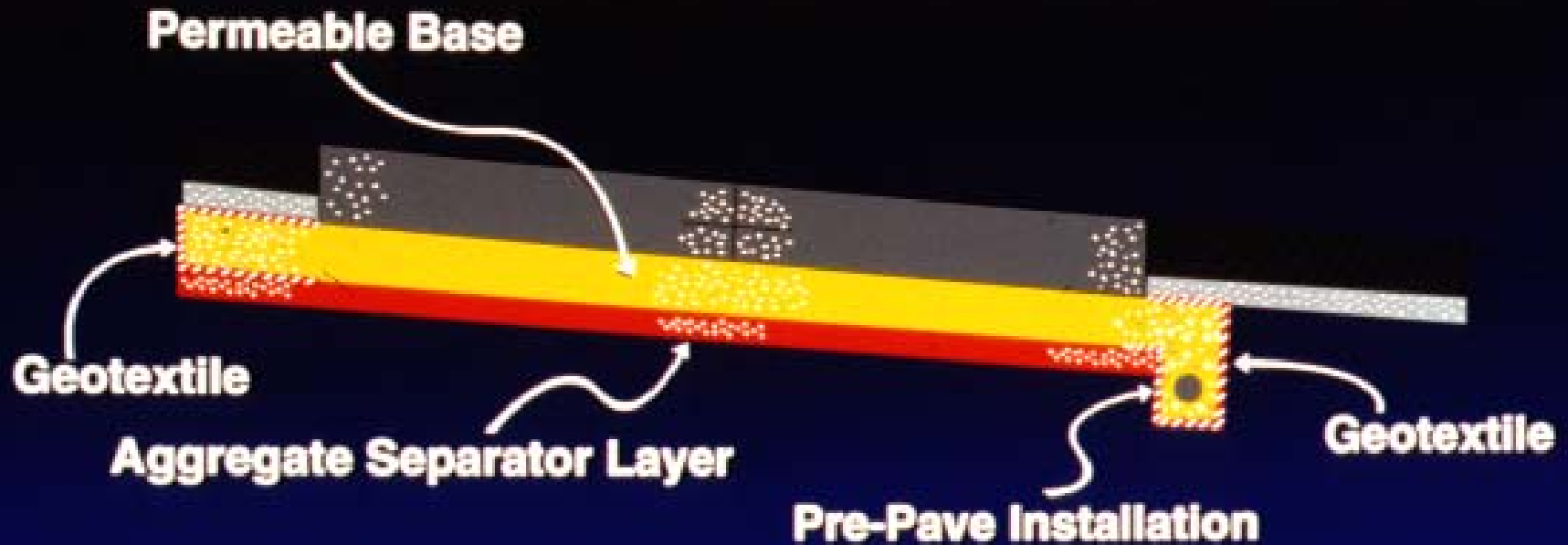
# OUTLET PIPE



# ***PCC Pavements***

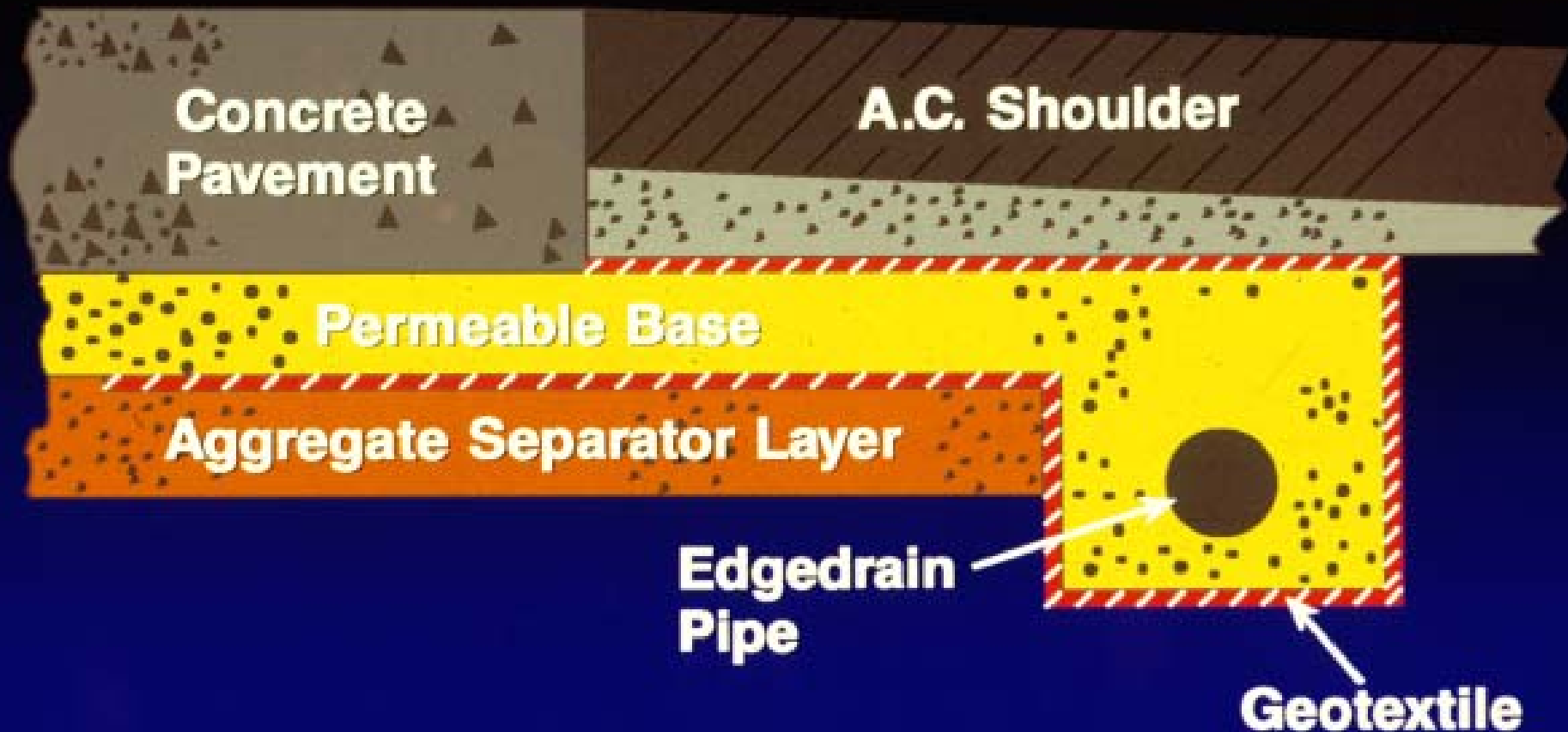


# EDGEDRAIN LOCATION - A.C SHOULDERS



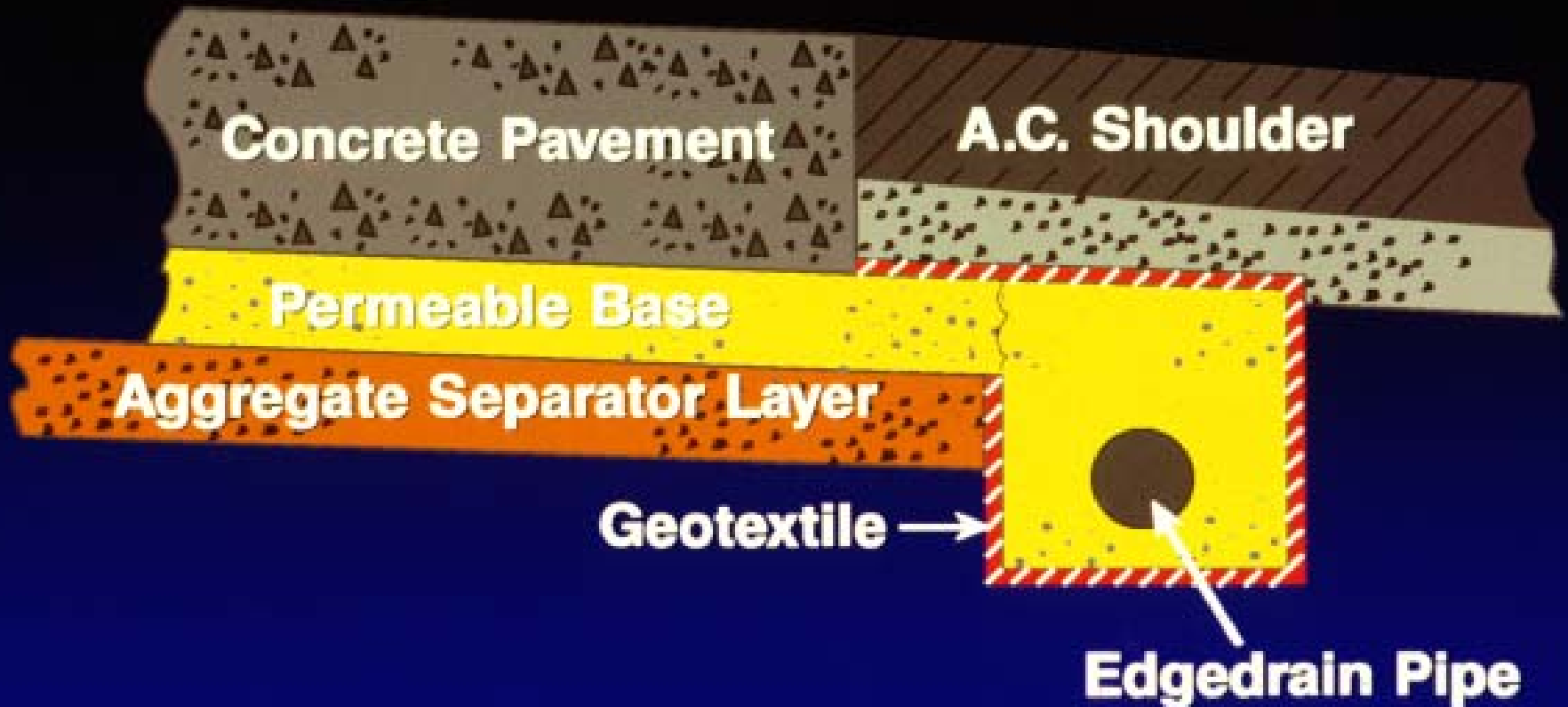
# PRE-PAVE INSTALLATION

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# POST PAVE INSTALLATION

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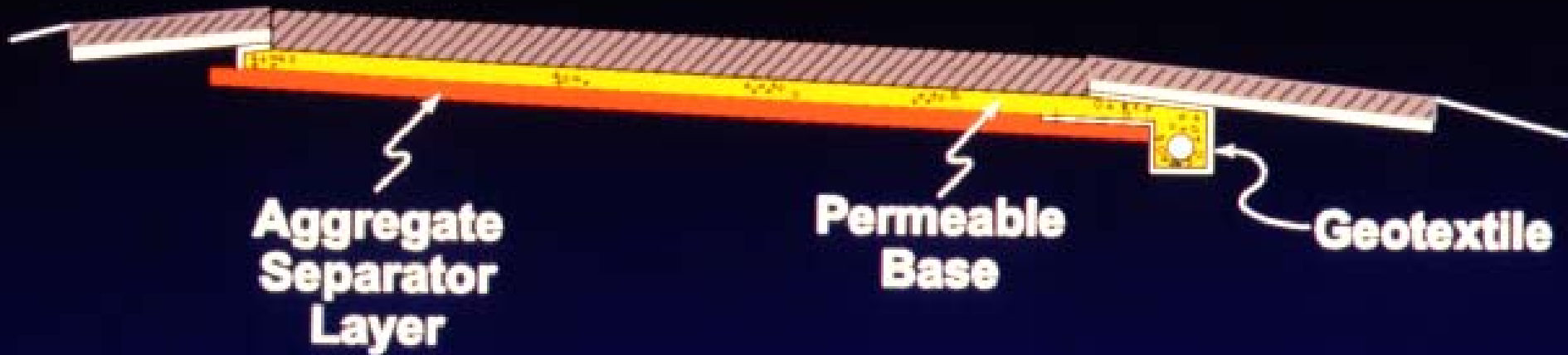


# *Flexible Pavements*



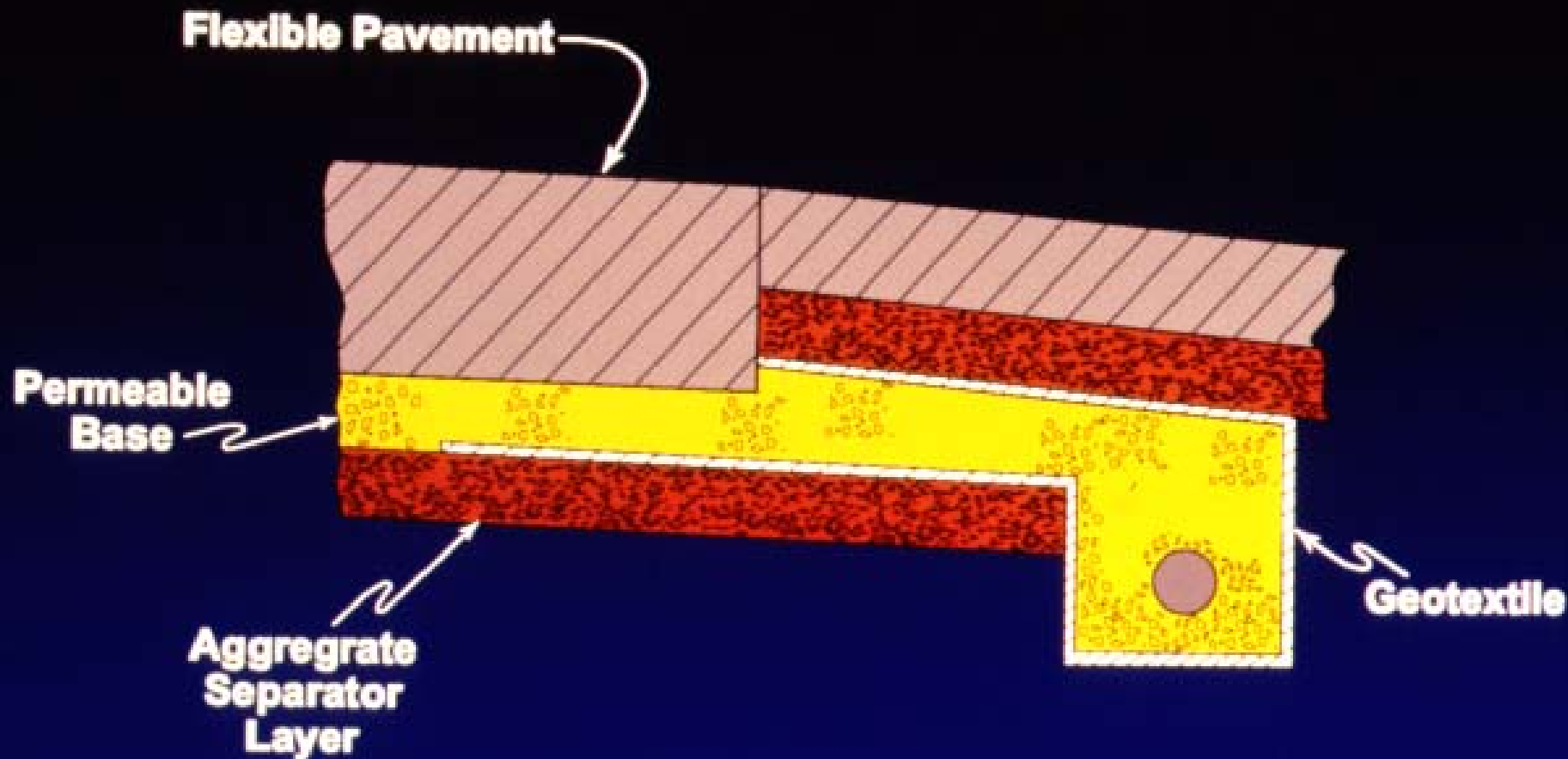
# FLEXIBLE PAVEMENT

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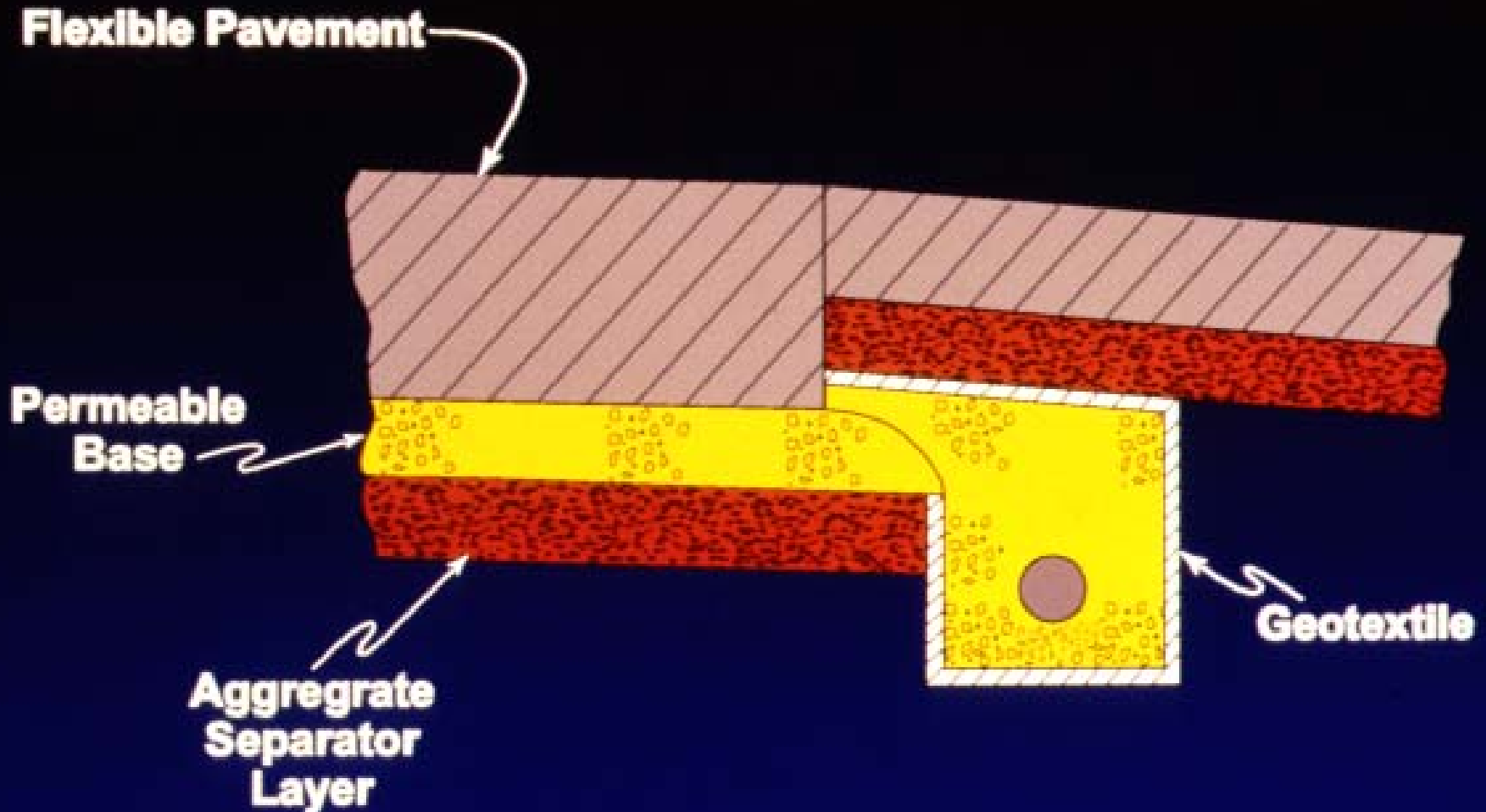
# PRE-PAVE INSTALLATION

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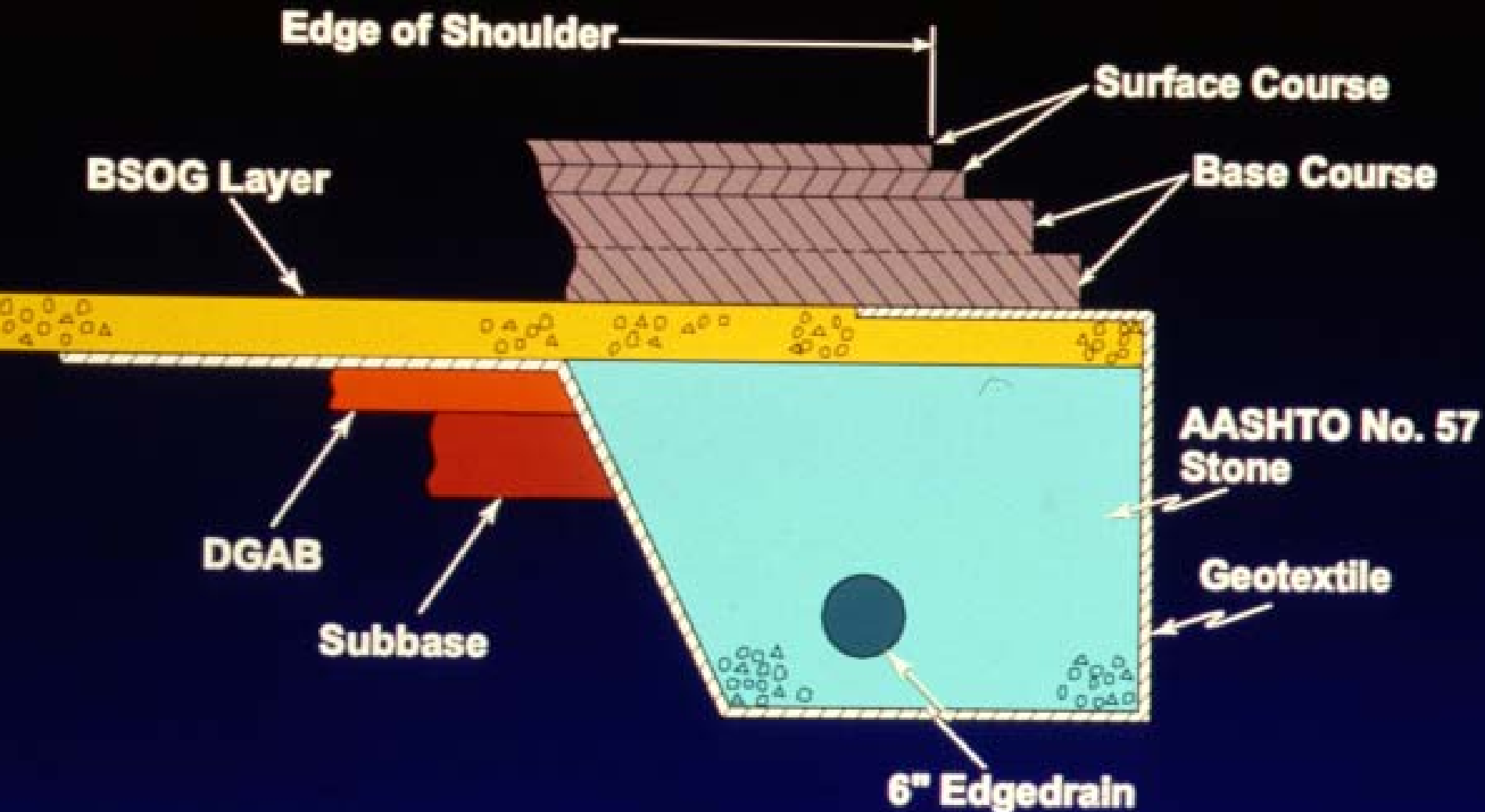


# POST-PAVE INSTALLATION

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# NEW JERSEY STANDARD



# DAYLIGHTING

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**PCC**

**Shoulder**

**Permeable Base**

**Not Recommended**

















**Federal Highway Administration**

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**VIDEO INSPECTION OF  
HIGHWAY EDGEDRAIN SYSTEMS**

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# BENEFITS

- **Quality Control**
- **Determine Maintenance Needs**

# PURPOSE

- **Qualitative Picture of Edgedrain Conditions**
- **Demonstrate Video Equipment**















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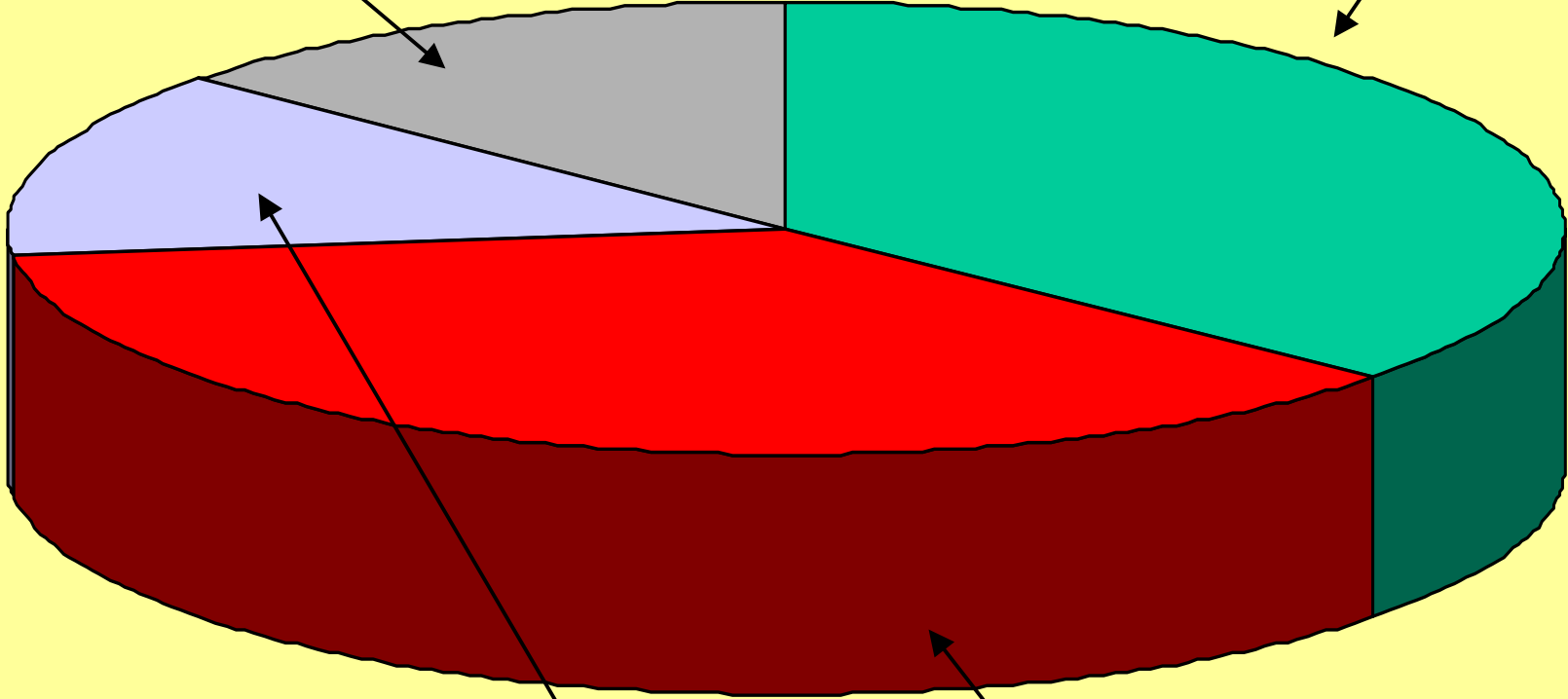
0:09:08

GREAT! A SNAKE  
WITH HEADLIGHTS-  
JUST WHAT I NEED.



**Outlets Non-Functional - 35%**

**Mainline Non Reviewable - 13%**



**Mainline Good - 35%**

**Mainline Non-Functional - 17%**

# Drainage Suggestions

# **PERMEABLE BASE**

- **Asphalt or Cement Stabilized**
- **Emphasis on Stability**

# NEW JERSEY BSOG

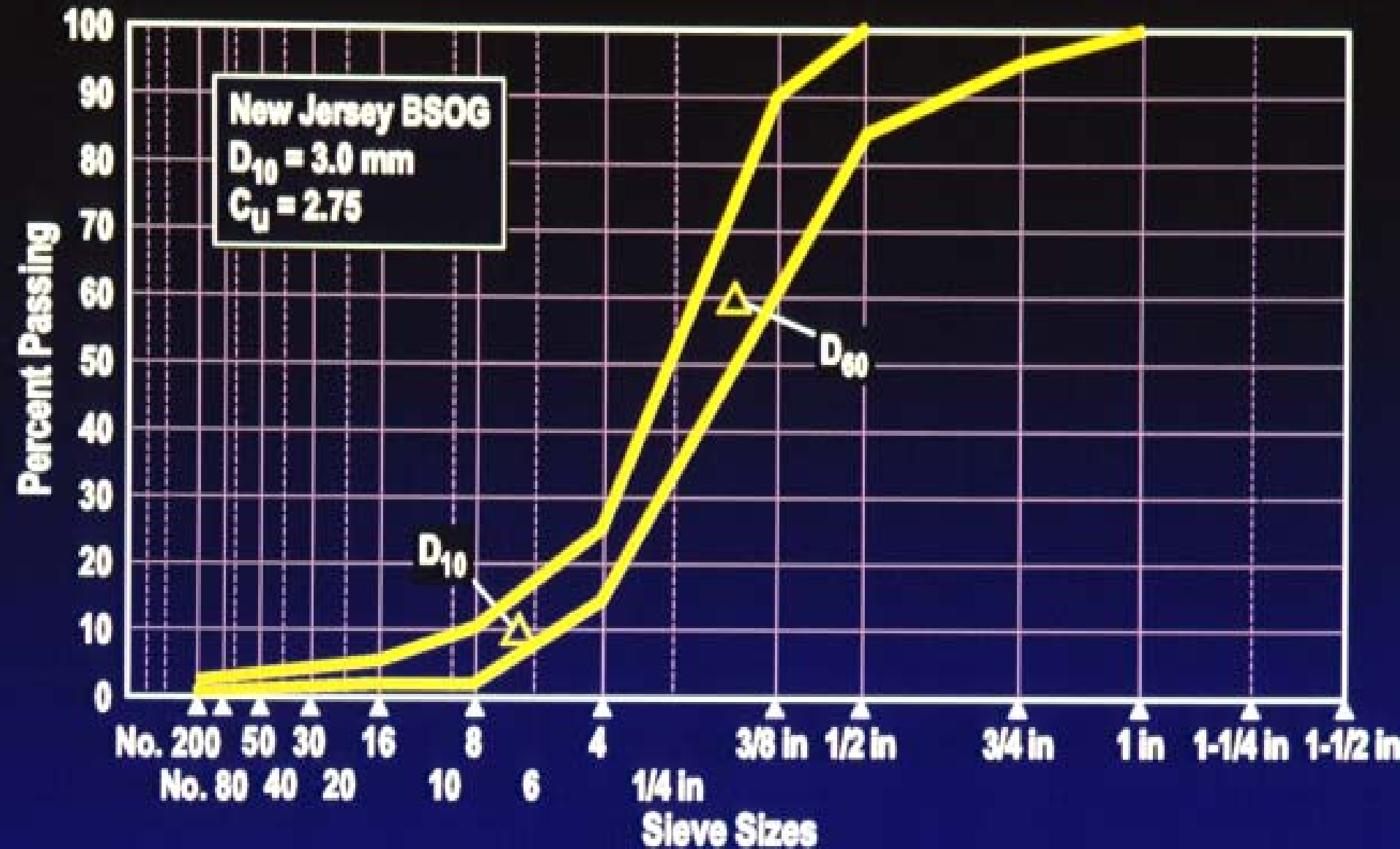
Sieve Sieve

Percent Passing

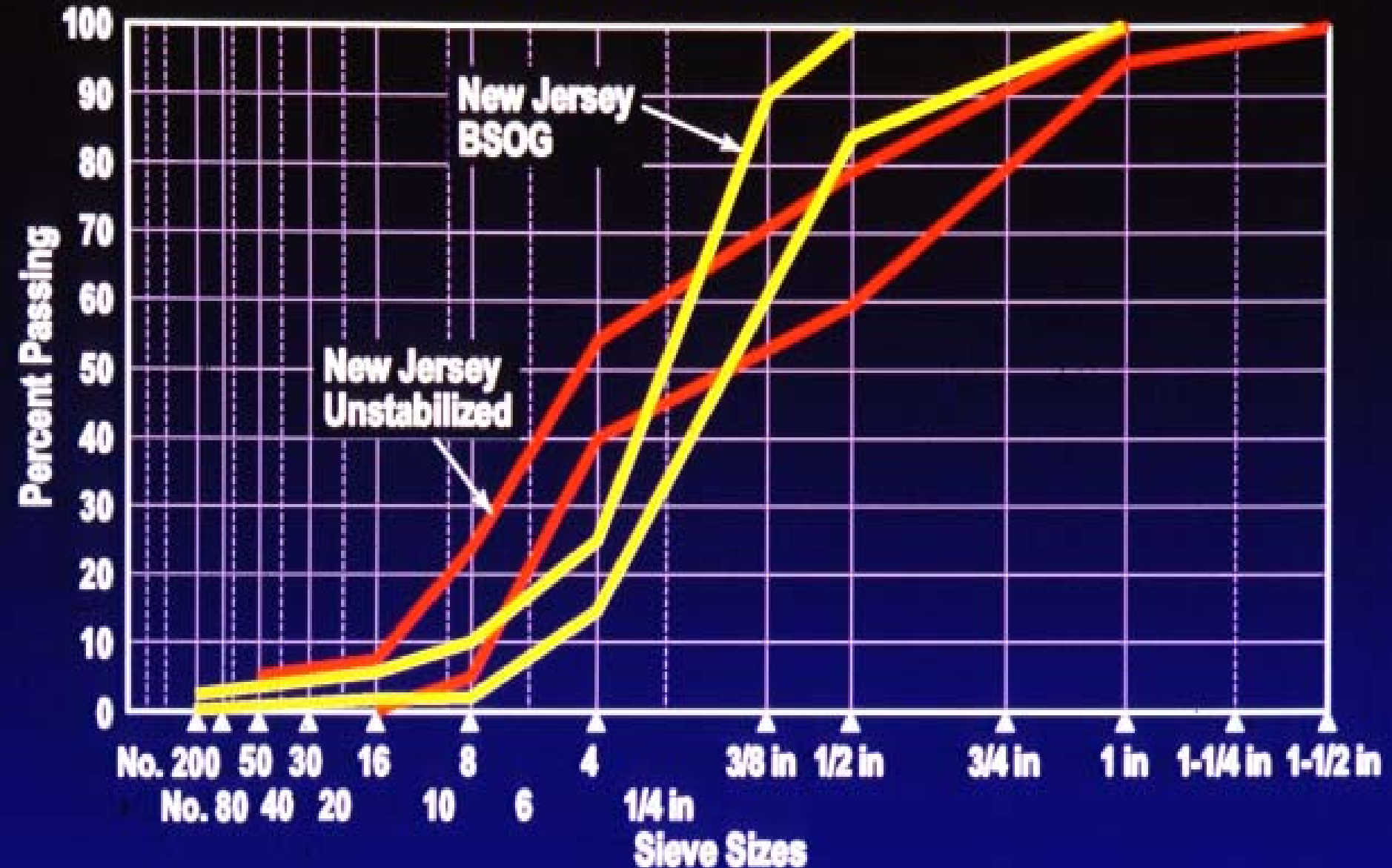
1"	100
3/4"	95 – 100
1/2"	85 – 100
3/8"	60 – 90
No.4	15 – 25
No.8	2 – 10
No.16	2 – 5
No. 200	*

\* Add 2% mineral filler

# PLOT OF NEW JERSEY – BSOG



# COMPARISON





# ASPHALT CONTENT

- 3 Percent

# ANTI-STRIPPING AGENT

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- **FHWA strongly recommends the use of a Anti-Stripping agent**

# **CEMENTED TREATED**

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**Portland Cement 2 to 3 bags  
per cu. yd.**

# EDGEDRAINS

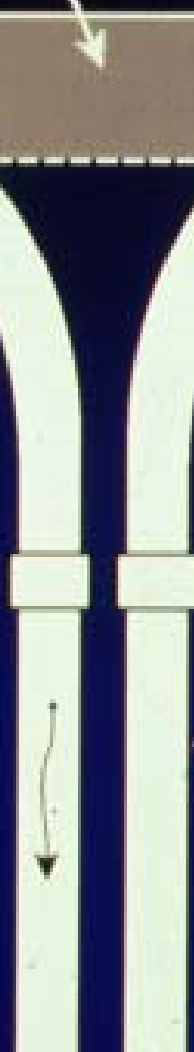
- **Strong Rigid Pipe**
- **100% Video Inspection**

# DUAL OUTLETS

Edgedrain Trench



Minimum  
30" Radius



4" Unslotted  
Plastic Pipe



# MAINTENANCE

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- **No Maintenance Commitment**
- **No Drainable Systems**

# MAINTENANCE

- **Modicum of Maintenance**