

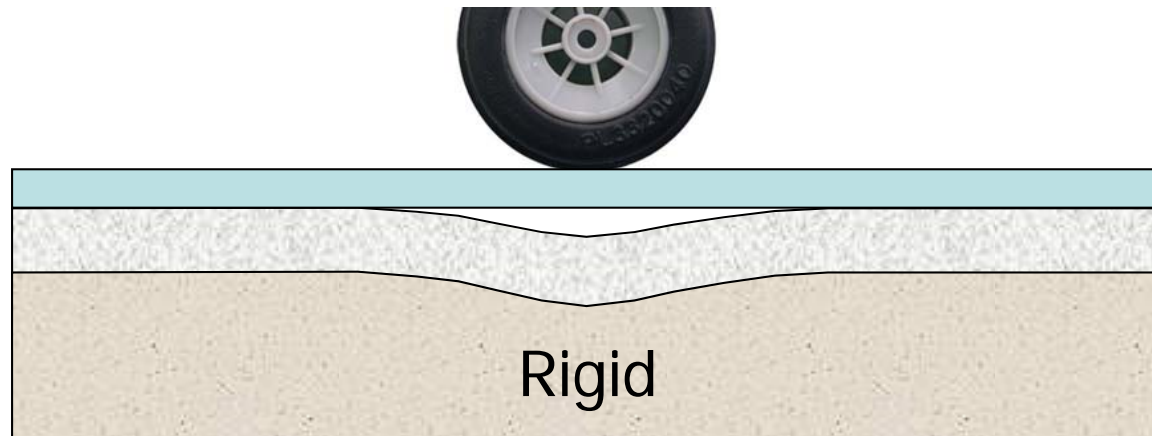
CIVL 4155/6155
Pavement Design & Evaluation

Dr. Roger Meier
ES 112C / 678-3284
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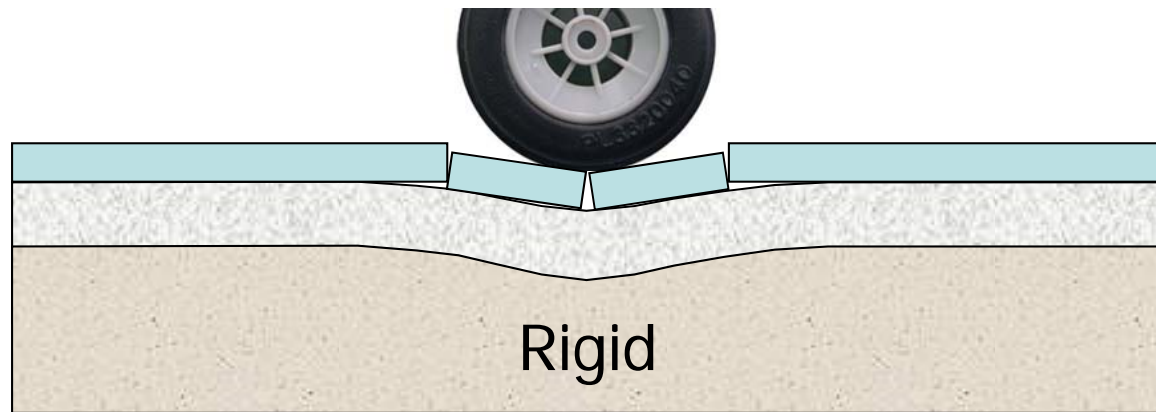
Life Without Pavements



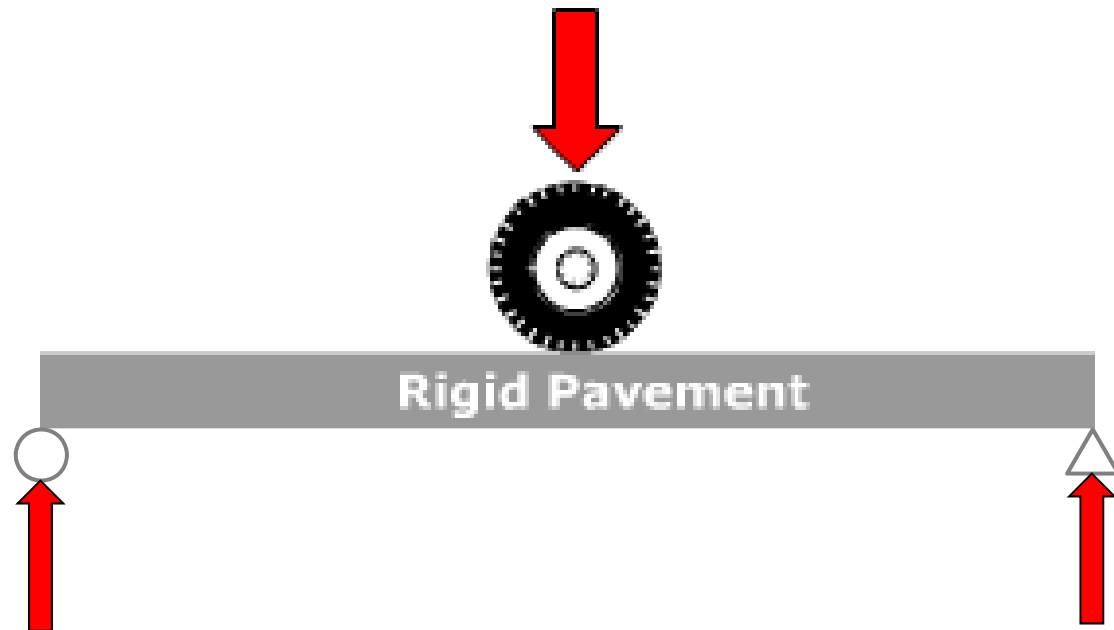
Pavement Types



Pavement Types

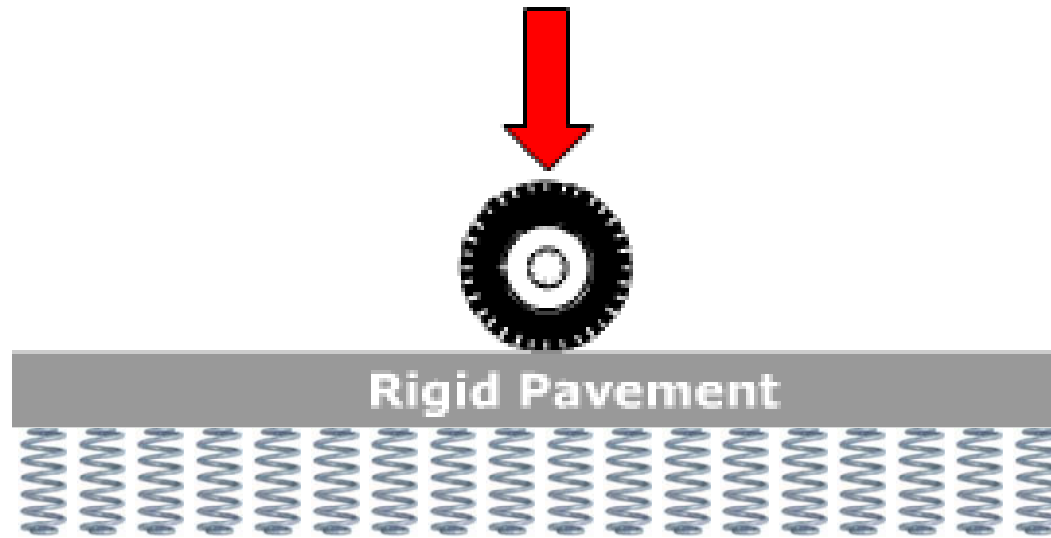


Rigid Pavements



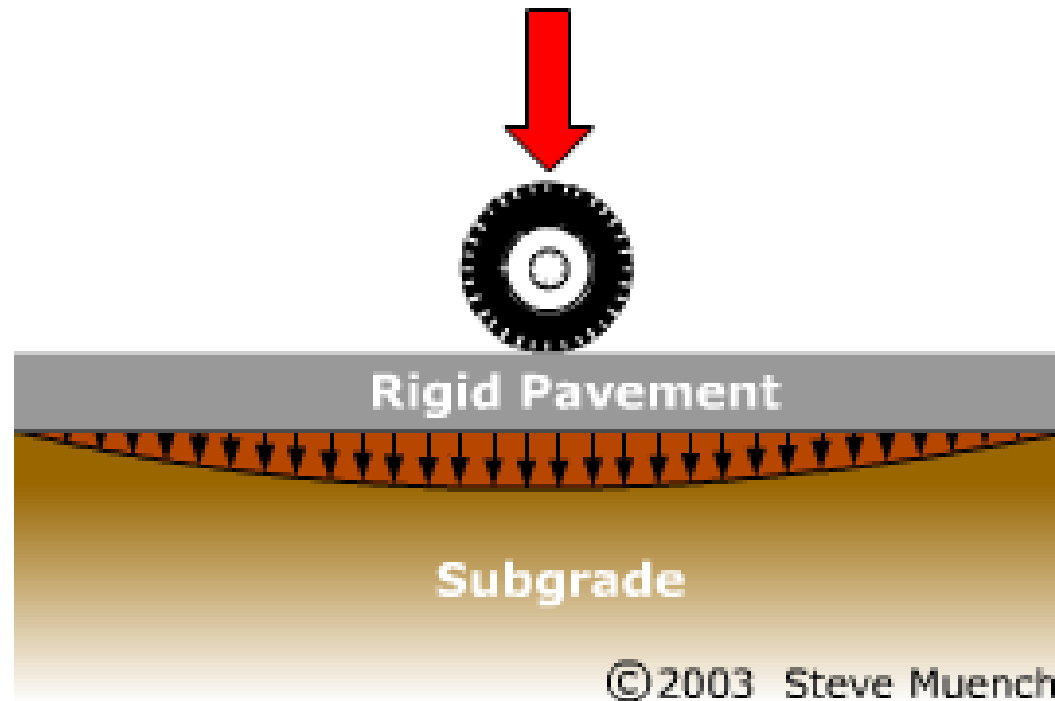
“Simply supported beam”

Rigid Pavements

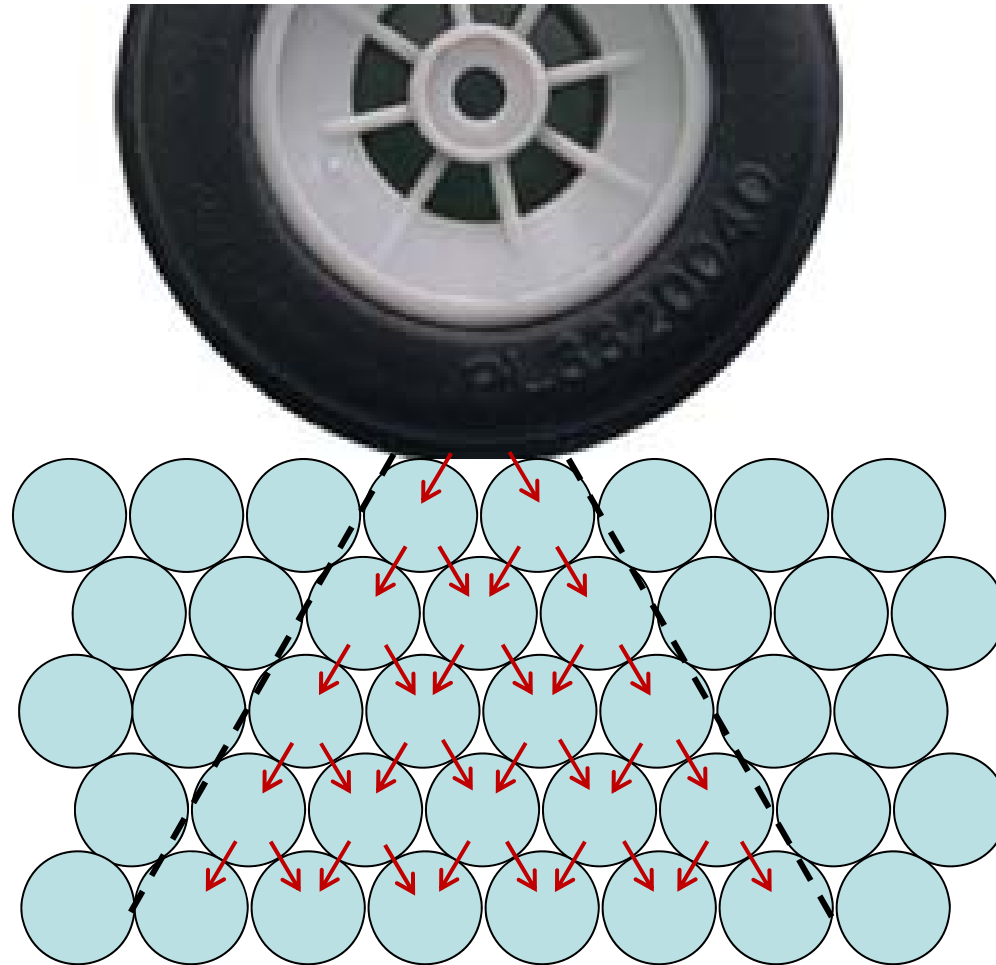


“Beam on elastic foundation”

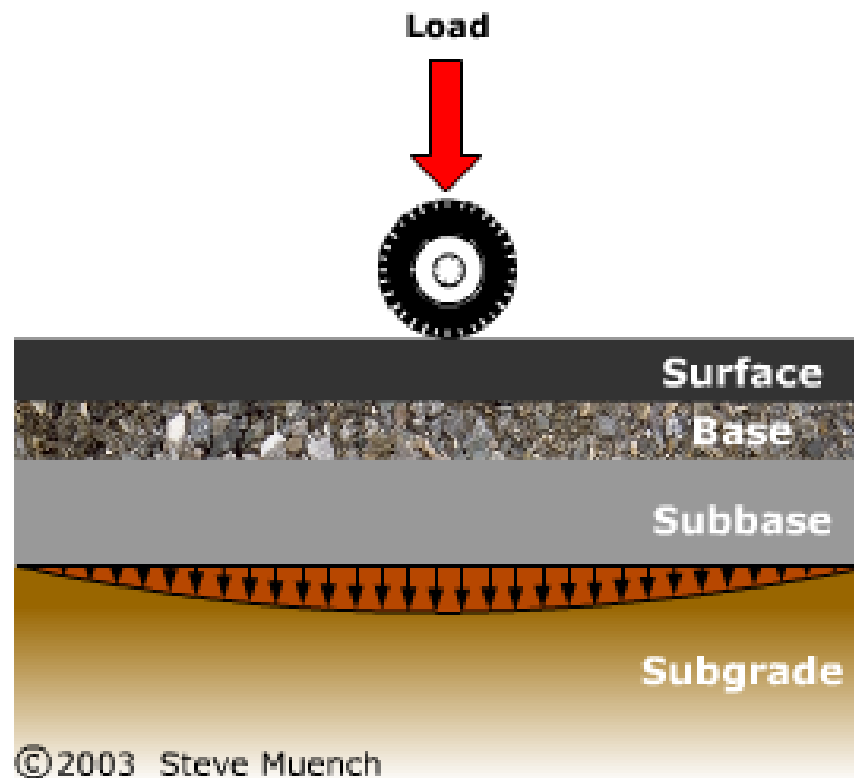
Load Transfer (Rigid)



Flexible Pavements

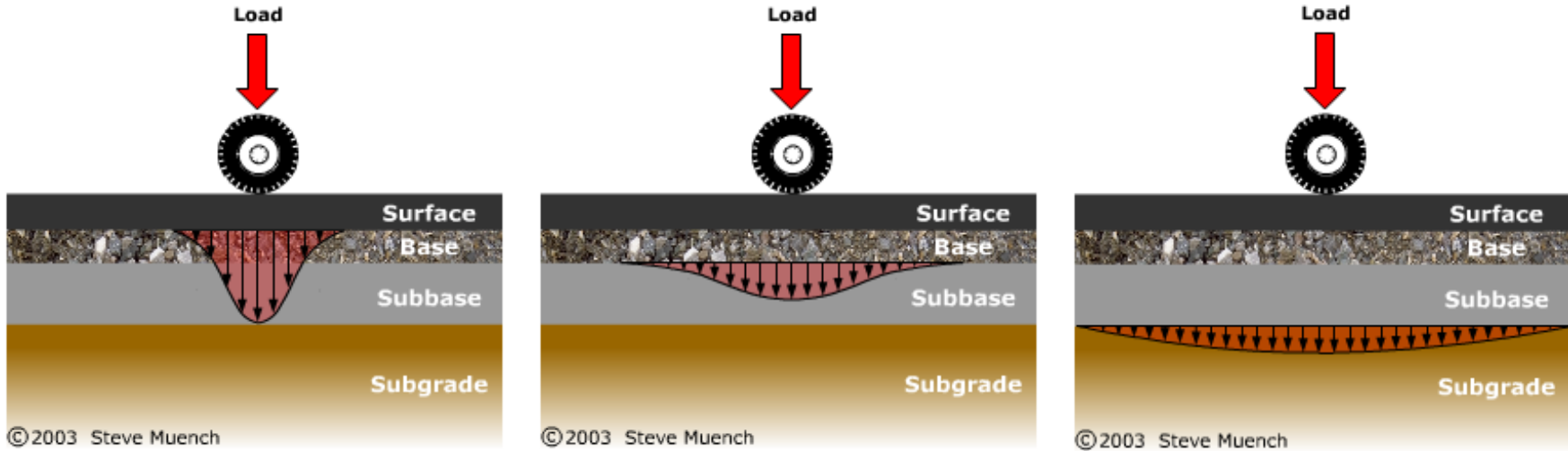


Flexible Pavements



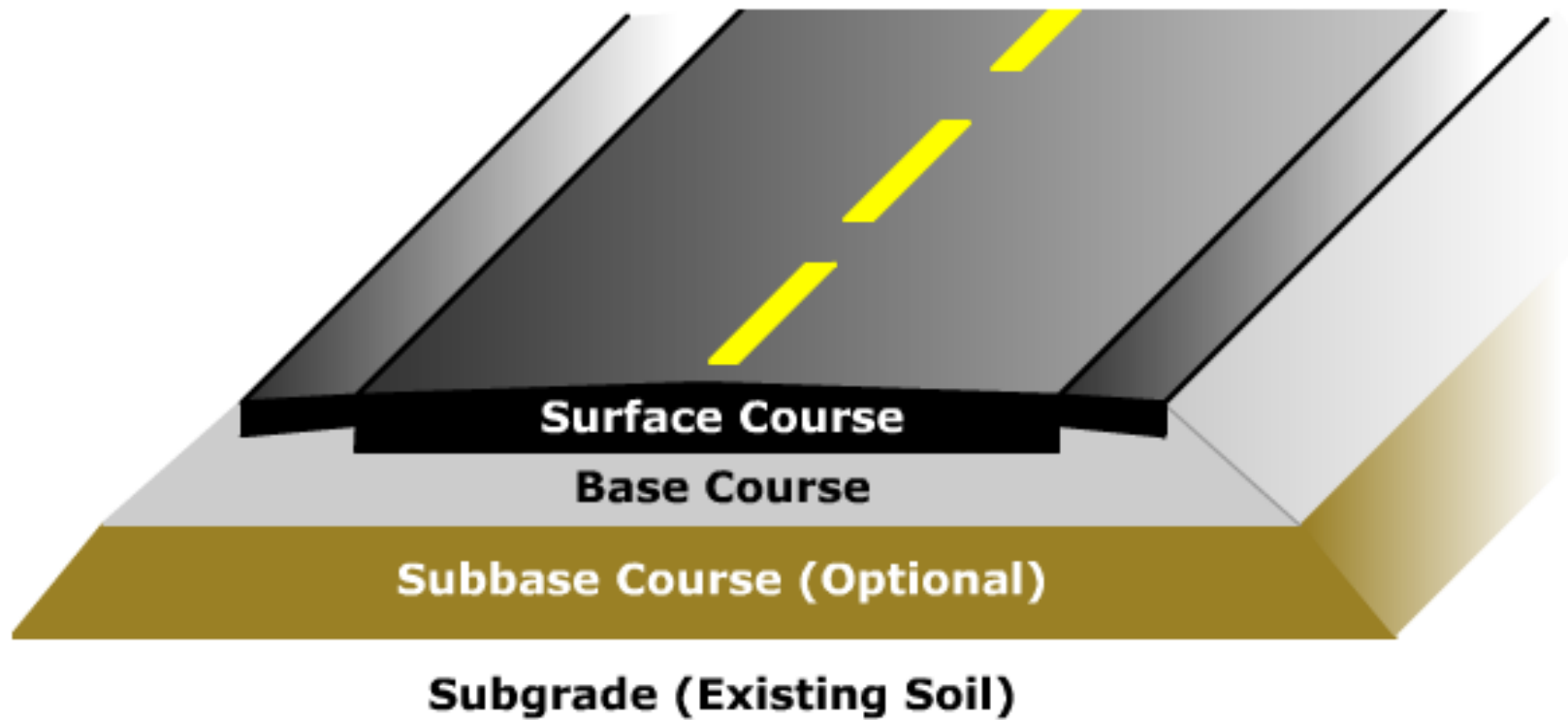
Source: WSDOT Pavement Guide Interactive CD-ROM

Load Transfer (Flexible)



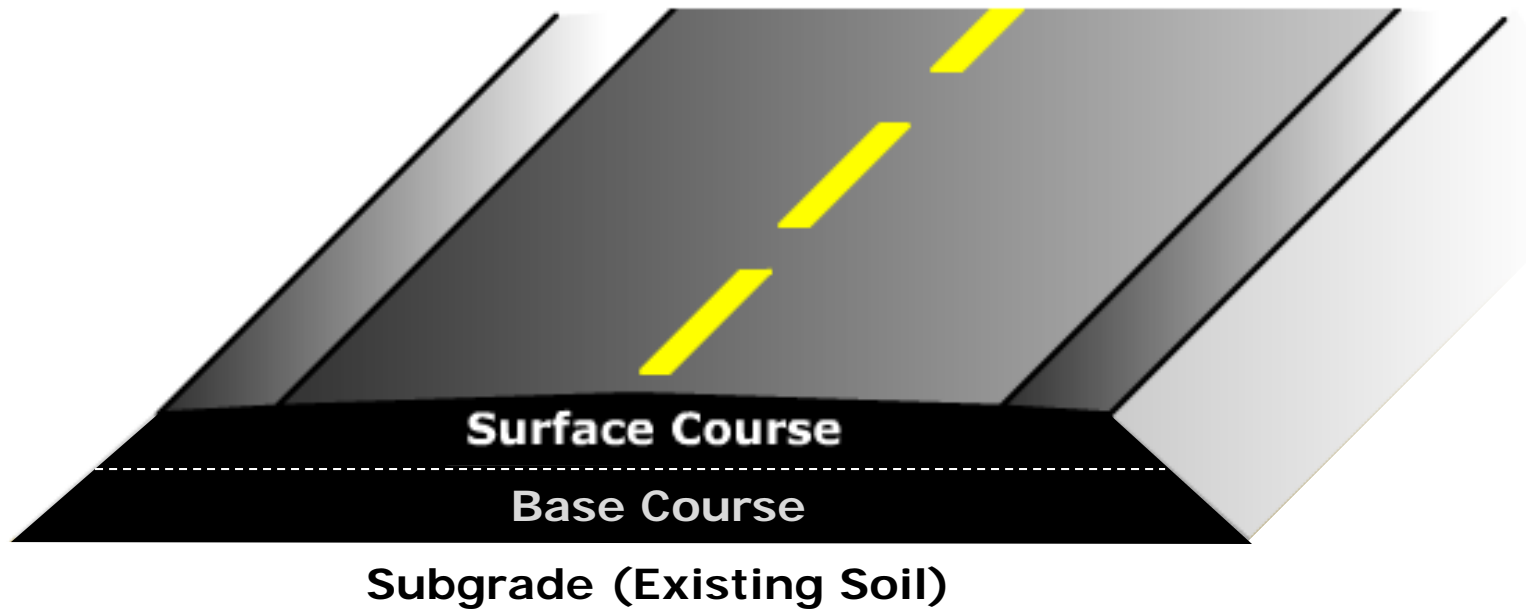
Source: WSDOT Pavement Guide Interactive CD-ROM

Pavement Structure (Flexible)



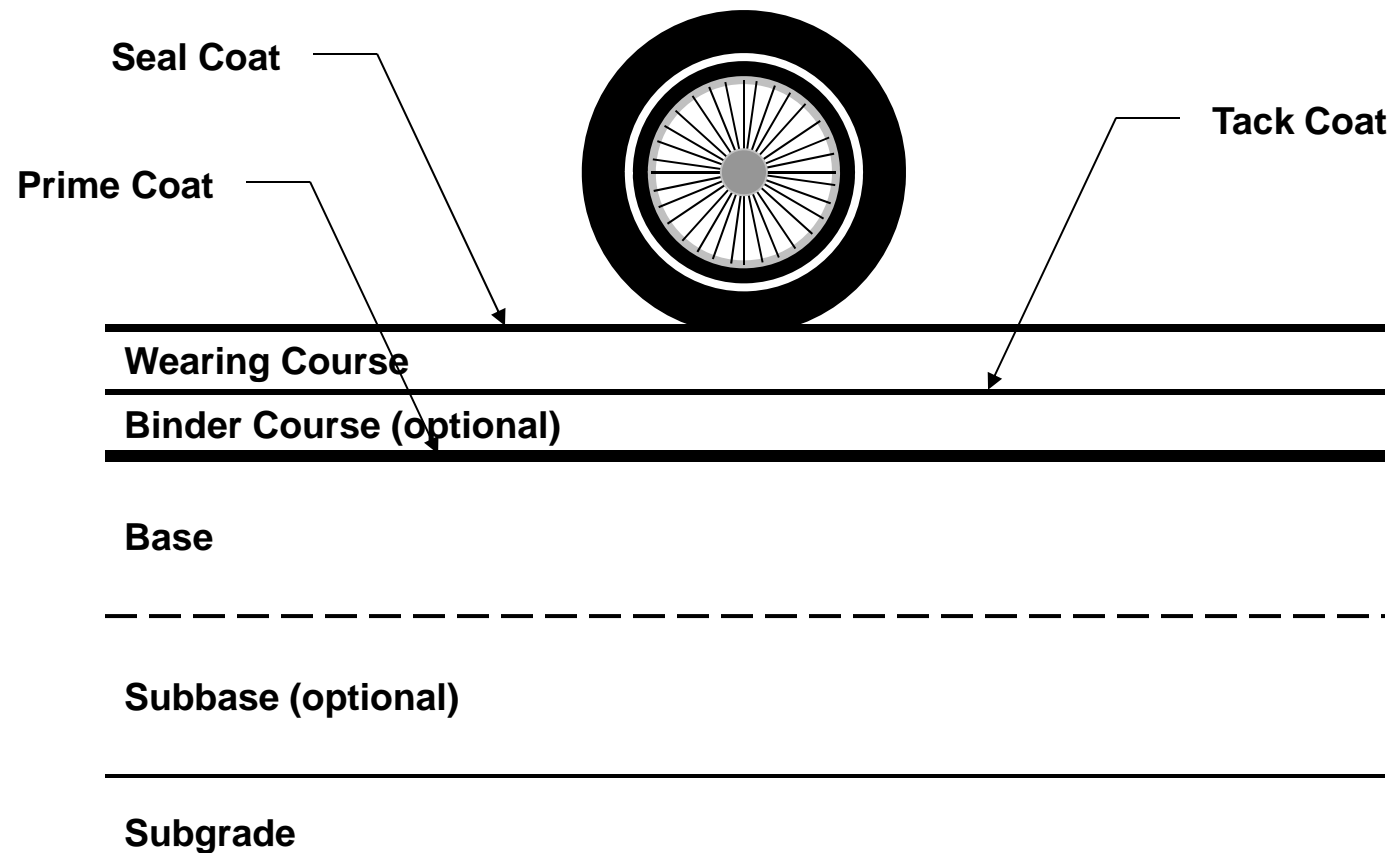
Source: WSDOT Pavement Guide Interactive CD-ROM

Full-Depth Asphalt Pavement



Source: WSDOT Pavement Guide Interactive CD-ROM

Flexible Pavements



Asphalt Prime Coat



Source: US Army Field Manual FM-540

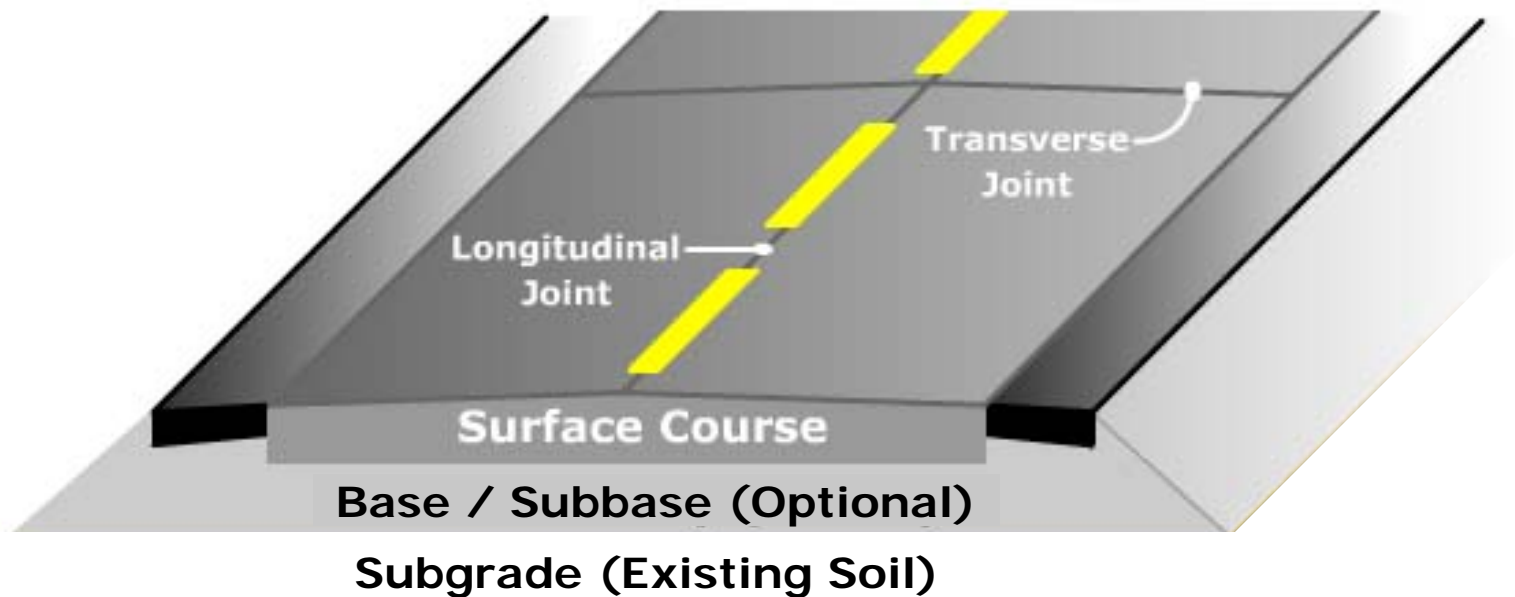
Asphalt Paving



Asphalt Paver



Pavement Structure (Rigid)



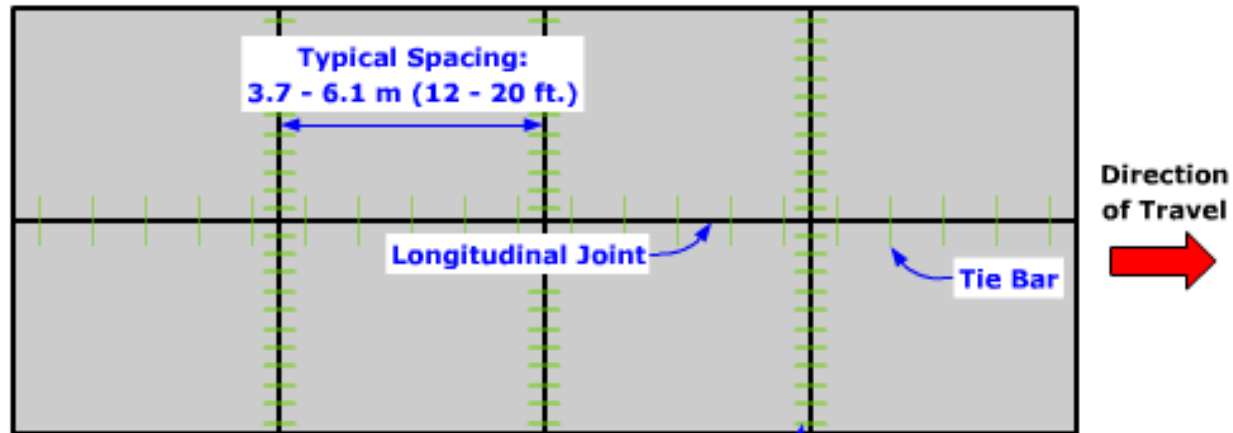
Contraction Joints



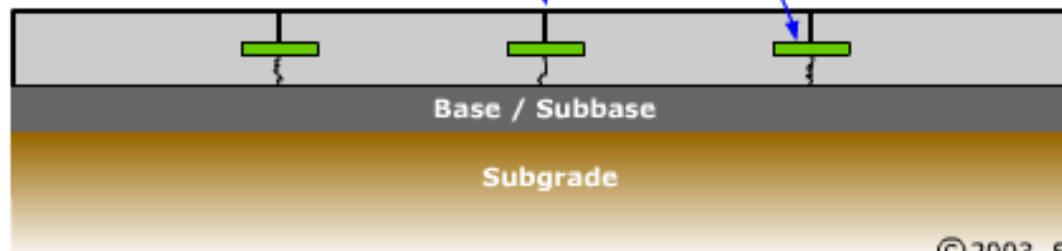
Source: WSDOT Pavement Guide Interactive CD-ROM

JPCP

Top View



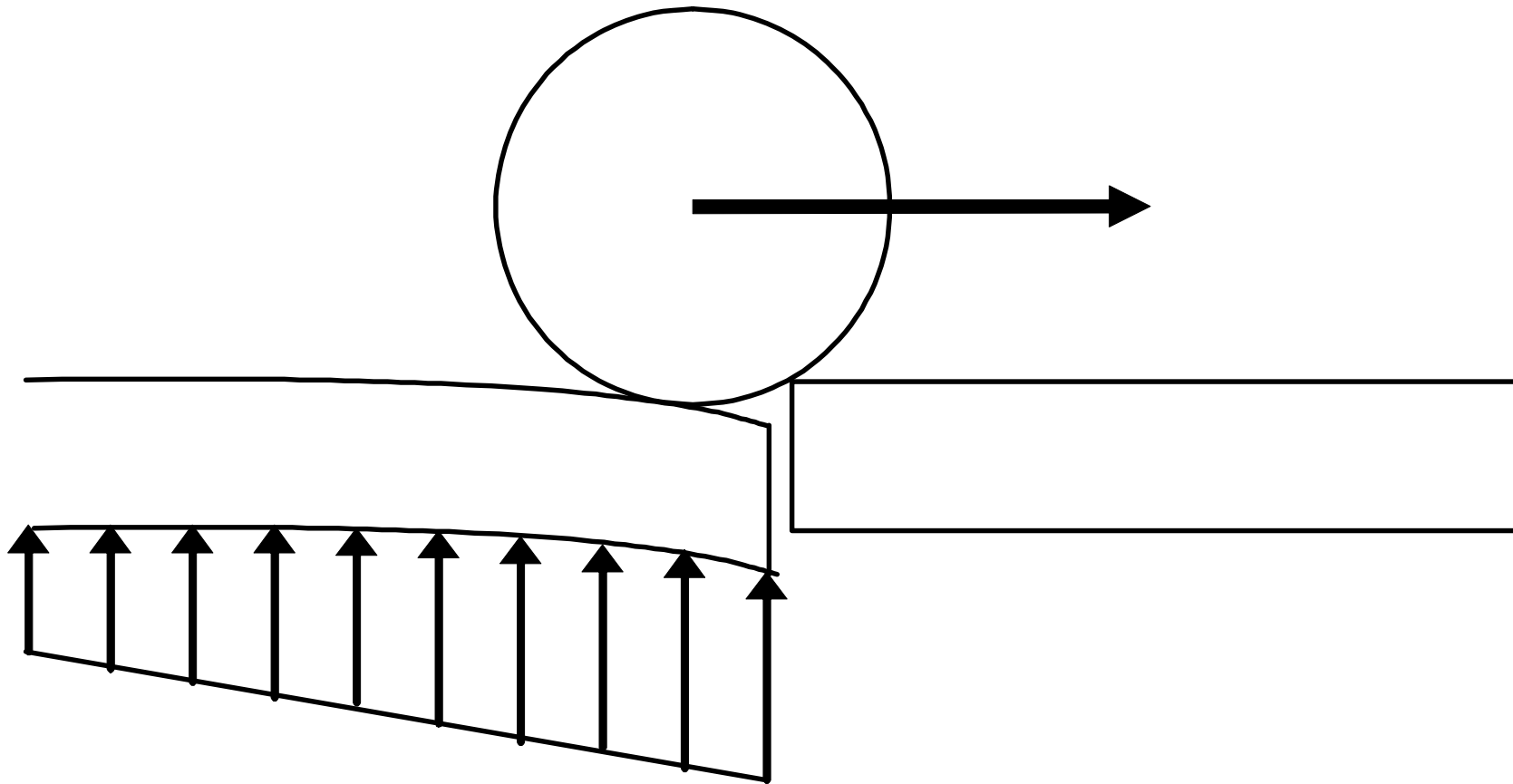
Side View



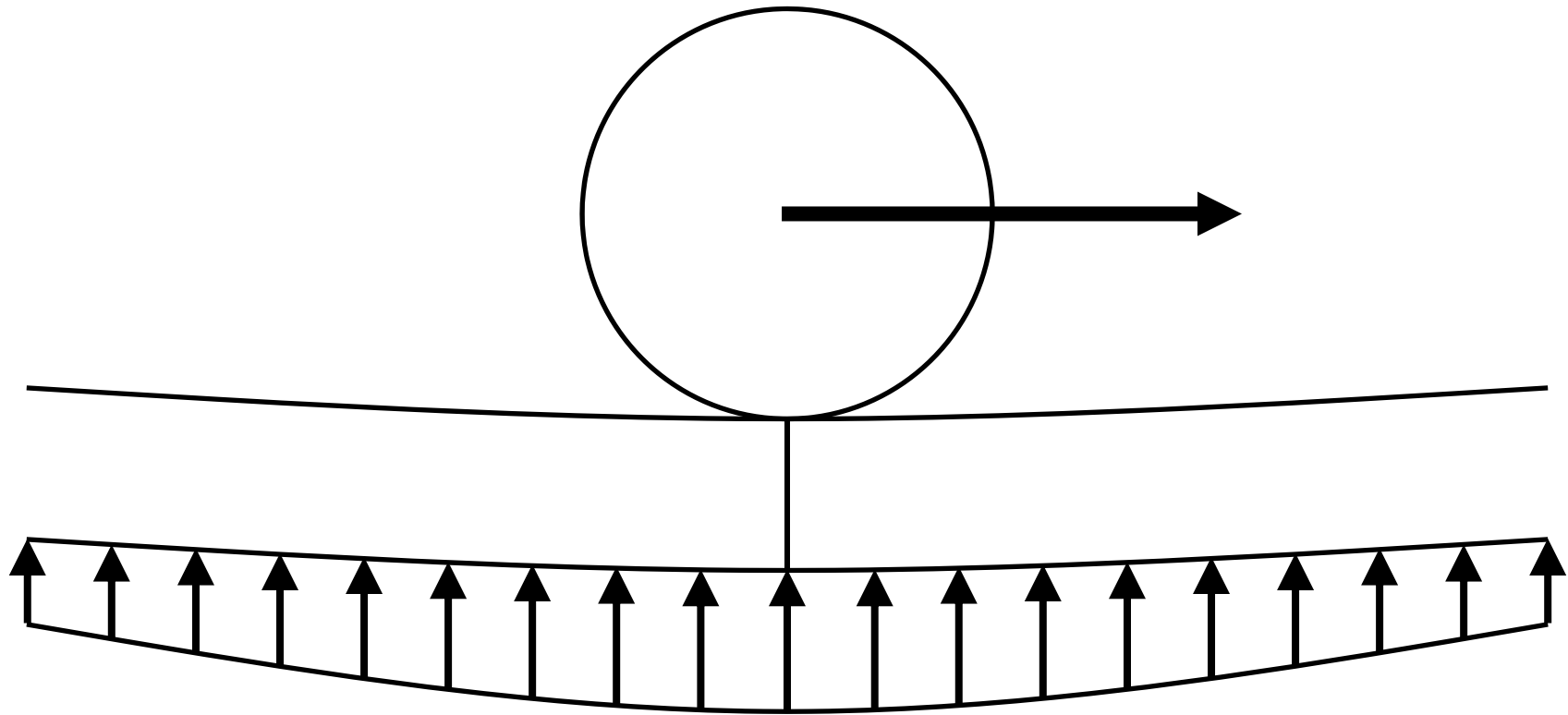
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Source: WSDOT Pavement Guide Interactive CD-ROM

Slab Continuity



Slab Continuity



Aggregate Interlock



Source: WSDOT Pavement Guide Interactive CD-ROM

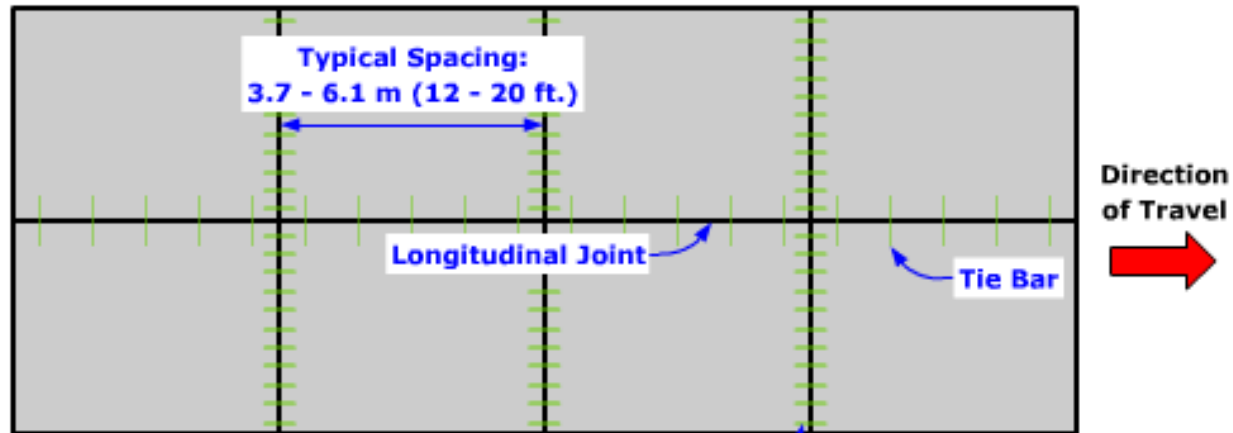
Dowel Bars



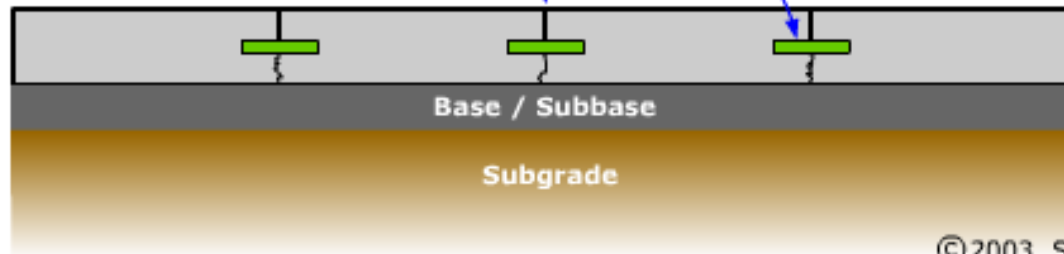
Source: WSDOT Pavement Guide Interactive CD-ROM

JPCP

Top View



Side View



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Source: WSDOT Pavement Guide Interactive CD-ROM

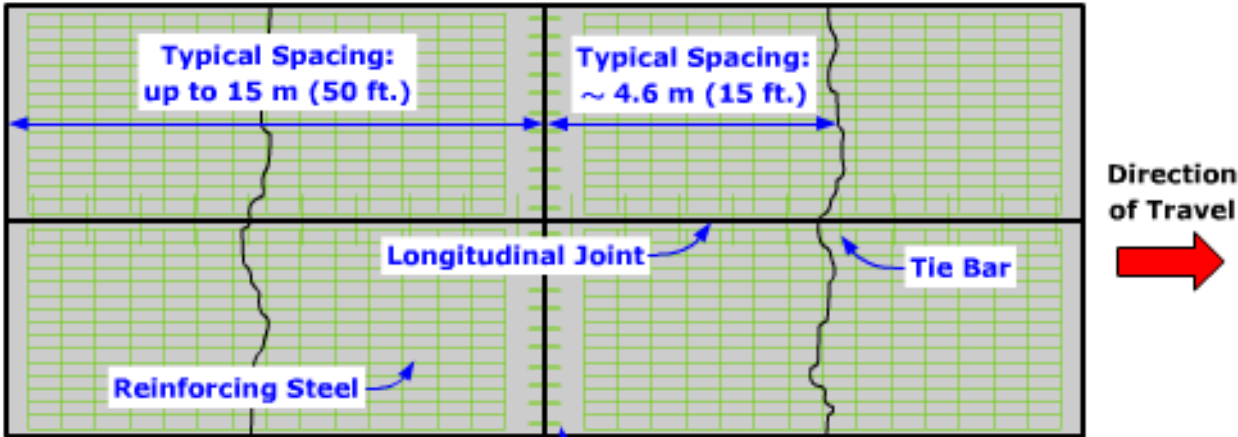
Tie Bars



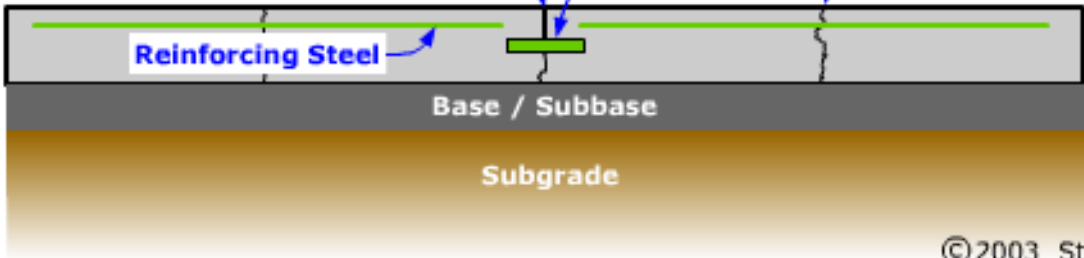
Source: WSDOT Pavement Guide Interactive CD-ROM

JRCP

Top View



Side View



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Source: WSDOT Pavement Guide Interactive CD-ROM

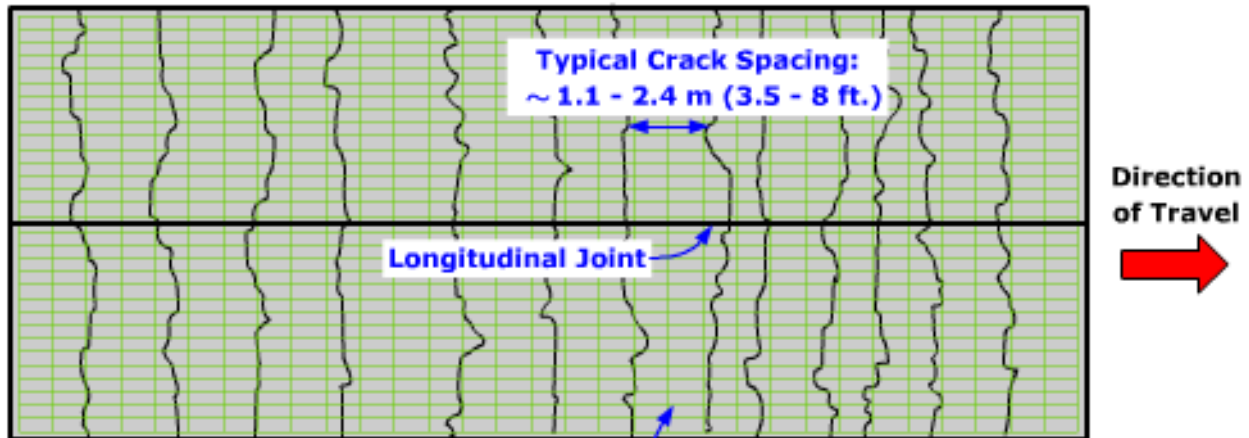
Wire Reinforcement



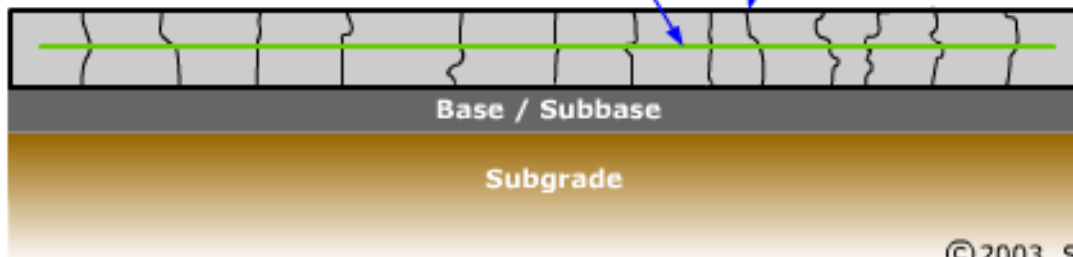
Source: <http://rebar.ecn.purdue.edu/wwr/>

CRCP

Top View



Side View



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CRCP Reinforcement



Source: *Better Roads*, October 2008

Slipform Paving



Source: http://www.starkcompanies.com/Body_HighwaysStreets.htm

Slipform Paving



Source: http://www.starkcompanies.com/Body_HighwaysStreets.htm

Slipform Paving



Source: http://www.starkcompanies.com/Body_HighwaysStreets.htm

Dowel Bar Basket



Dowel Bar Basket



Source: *Better Roads*, October 2008