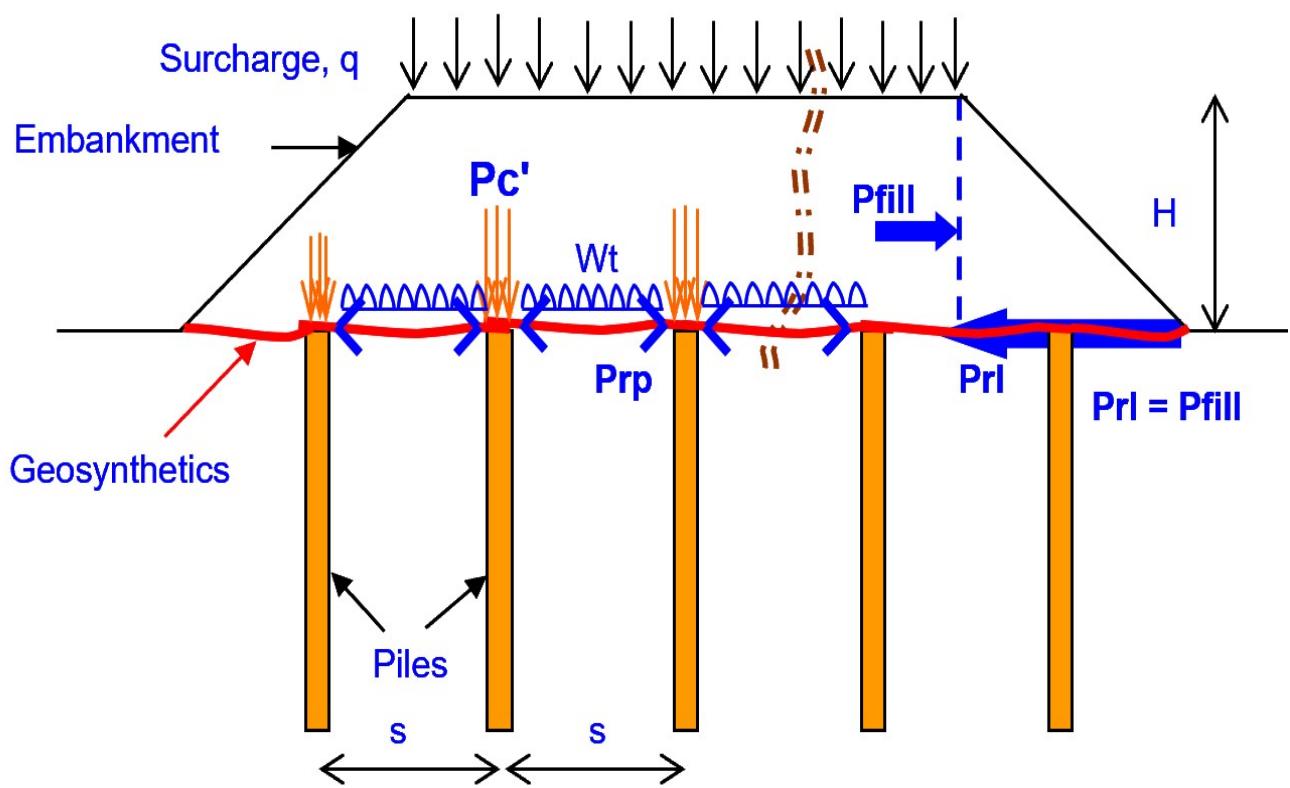
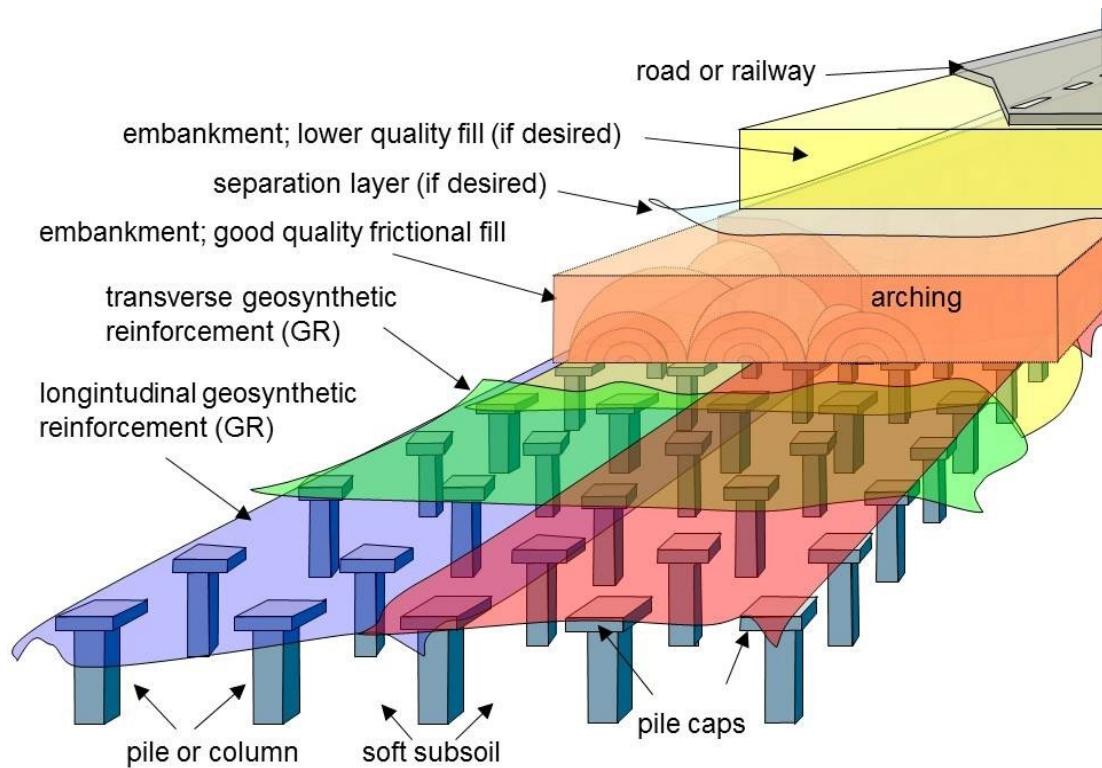


# PILED EMBANKMENT WITH GEOSYNTHETICS REINFORCEMENT



# **PILED EMBANKMENT**

## **with**

## **GEOSYNTHETICS**

## **REINFORCEMENT**

<b>Piled Embankment with Geosynthetics Reinforcement .....</b>	<b>GS09-1</b>
1. Conventional Pile embankment.....	GS09-2
2. Geosynthetic Pile Embankment.....	GS09-3
3. Design of Geosynthetics Pile Embankment .....	GS09-4
• Force Transferred to Piles	
• Horizontal Outward Thrust	
4. Transfer of Vertical Embankment Stresses.....	GS09-7
5. Uneven Load Distribution .....	GS09-7
6. Arching Effects .....	GS09-8
7. Vertical Stress Ratio .....	GS09-8
8. Arching Coefficient.....	GS09-9
9. Distributed Load between Piles .....	GS09-9
10. Geosynthetic Tensile Load .....	GS09-10
11. Geosynthetic Horizontal Outward Thrust Load .....	GS09-12
12. Overall Tensile Requirement.....	GS09-13
13. Calculation Example.....	GS09-14
14. References.....	GS09-18
<b>Importance of Elongation Factor in Determining Geosynthetics Stiffness for Finite Element Calculation .....</b>	<b>GS04-1</b>
1. Introduction .....	GS04-2
2. Geosynthetics Working Principle .....	GS04-4
3. Breaking Strength and Elongation .....	GS04-5
4. Example of Tensile Test Result.....	GS04-6
5. Long Term Creep Rupture Strength.....	GS04-6
6. Creep Isochronous Curve .....	GS04-7
7. Time Creep Degradation Curve.....	GS04-8
8. Design Strength of Geosynthetics.....	GS04-9
9. Stiffness of Geosynthetics.....	GS04-10
10. Example Calculation.....	GS04-11
11. Conclusions .....	GS04-11
12. References.....	GS04-12