

## Slope Stabilization with Piles: The Logan Town Center Case Study in Altoona



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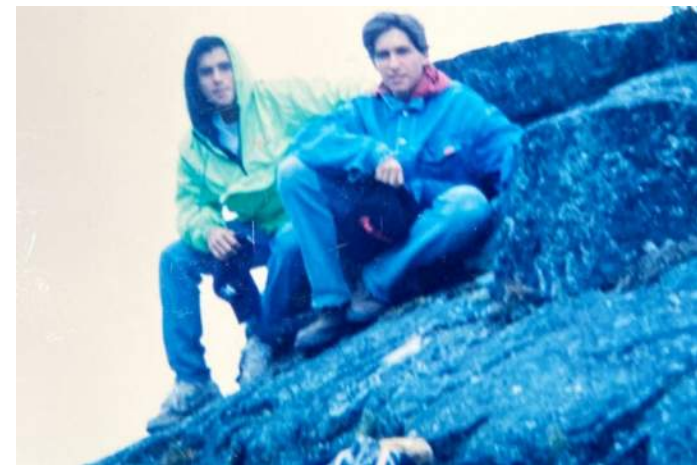


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# Outline

- **Traditional methods: landslide stabilization**
- **Design principles of landslide stabilization with deep foundations**
- **Case study: Logan Town Center rockslide**
- **Lessons learned and conclusions**





Slide removal....



Reconstruction (GRS)







← drains + lime stabilization











# Failure Mechanisms

- **Passive pressure above failure plane?**
- **Pile embedment?**
- **Pile spacing?**
- **Structural capacity?**

