

## Bibliography - LimitState:GEO

LimitState:GEO uses the groundbreaking Discontinuity Layout Optimization (DLO) procedure, originated and developed at the University of Sheffield by LimitState co-founders Dr Colin Smith and Dr Matthew Gilbert. Presented here is a list of recent publications describing DLO and its applications. (Note that some entries are duplicated where they cover more than one topic area).

### 1 Foundations

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5. C. Smith and M. Gilbert. New upper bound solutions for layered soil bearing capacity problems using discontinuity layout optimization. In *10th Australia New Zealand Conference on Geomechanics*, pages 250–255, Brisbane, October 2007b

### 2 Slope stability and Embankments

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2. B. Leshchinsky. Bearing capacity of footings placed adjacent to  $c-\phi$  slopes. *Journal of Geotechnical and Geoenvironmental Engineering*, 141(6):04015022, 2015
3. B. Leshchinsky and S. Ambauen. Limit equilibrium and limit analysis: Comparison of benchmark slope stability problems. *Journal of Geotechnical and Geoenvironmental Engineering*, page 04015043, 2015
4. B. Leshchinsky. Comparison of limit equilibrium and limit analysis for complex slopes. *Proceedings of GeoCongress*, pages 1280–1289, 2013

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2. S. Clarke, C. Smith, and M. Gilbert. Analysis of the stability of sheet pile walls using discontinuity layout optimization. *Numerical Methods in Geotechnical Engineering:(NUMGE 2010)*, page 163, 2000

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2. H. Aldaikh, J. Knappett, M. Brown, and S. Patra. Evaluation of monotonic ultimate pull-out capacity of plate anchors in sand. In *Information Technology in Geo-Engineering: Proceedings of the 2nd International Conference (ICITG) Durham, UK*, volume 3, page 291. IOS Press, 2014

3. R. Merifield and C. Smith. The ultimate uplift capacity of multi-plate strip anchors in undrained clay. *Computers and Geotechnics*, 37(4):504–514, 2010

## 5 Reinforced soil

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2. Y. Xie and B. Leshchinsky. MSE walls as bridge abutments: Optimal reinforcement density. *Geotextiles and Geomembranes*, 43(2):128–138, 2015
3. F. Vahedifard, B. A. Leshchinsky, S. Sehat, and D. Leshchinsky. Impact of cohesion on seismic design of geosynthetic-reinforced earth structures. *Journal of Geotechnical and Geoenvironmental Engineering*, 2014
4. B. Leshchinsky. Limit analysis optimization of design factors for mechanically stabilized earth wall-supported footings. *Transportation Infrastructure Geotechnology*, 1(2):111–128, 2014
5. B. Leshchinsky. Maximum tensile loads in reinforcements for mse walls: A comprehensive stability check revisited with limit analysis. In *Geo-Congress 2014 Technical Papers@ sGeo-characterization and Modeling for Sustainability*, pages 3153–3162. ASCE
6. S. D. Clarke, C. Smith, and M. Gilbert. Modelling discrete soil reinforcement in numerical limit analysis. *Canadian Geotechnical Journal*, 50(7):705–715, 2013
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8. E. Belczyk and C. Smith. Geosynthetic landfill cap stability: comparison of limit equilibrium, computational limit analysis and finite-element analyses. *Geosynthetics International*, 19(2):133–146, 2012

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3. A. S. A. Rashid, J. A. Black, H. Mohamad, and N. M. Noor. Behavior of weak soils reinforced with end-bearing soil-cement columns formed by the deep mixing method. *Marine Georesources & Geotechnology*, 33(6):473–486, 2015b

## 7 Masonry structures

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2. M. Gilbert, C. C. Smith, and T. J. Pritchard. Masonry arch analysis using discontinuity layout optimisation. *Proceedings of the Institution of Civil Engineers - Engineering and Computational Mechanics*, 163(3): 155–166, 2010b

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2. C. Smith. Application of computational limit analysis in ultimate limit state design. *Modern Geotechnical Design Codes of Practice: Implementation, Application and Development*, 1:195, 2012a
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## 11 General

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