



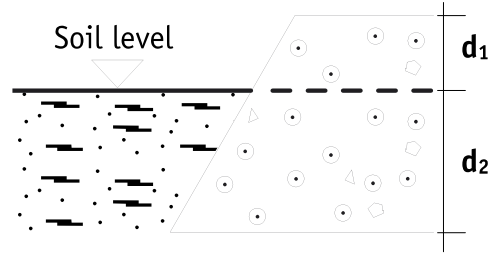
Project name: Suncor/AMEC Cedar Point Wind Farm Design

Required bearing capacity of base course (CBR_{top}) 15 % Total area [m²: 189000

Local conditions:

Estimated road dimensions, length: 31500 m x width 6 m
 Bearing capacity (CBR, bottom) of subgrade 2.0 %
 d₁: 0 cm

Soil excavation (d₂)*: 3.43 £/t
 Removal deposit (d₂)*: 0 £/t
 Gravel*: 14.02 £/t
 Crushed gravel*: 14.02 £/t
 Combigrid®/Secugrid®: 4.96 £/m²



Calculations are based on a bulk factor of 1.0 for the following densities: well graded rounded gravel 1.9t/m, well graded angular gravel 1.8t/m | * Prices vary regional

This software recommendation is only valid if the CBR value is determined according to BS 1377 (Determination of equivalent CBR (acc. to DMRB Vol. 7, IAN 73/06-REV 1 (2014)))

Overview material:

well graded rounded gravel:	thickness	volume	mass	Geogrid *
without Combigrid® / Secugrid®	63 cm	119,070 m ³	226,233 t	
with Combigrid® / Secugrid®	43 cm	81,270 m ³	154,413 t	378,000 m ²
well graded angular gravel:	thickness	volume	mass	Geogrid *
without Combigrid® / Secugrid®	52.5 cm	99,225 m ³	178,605 t	
with Combigrid® / Secugrid®	27 cm	51,030 m ³	91,854 t	189,000 m ²

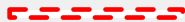
Overview costs:

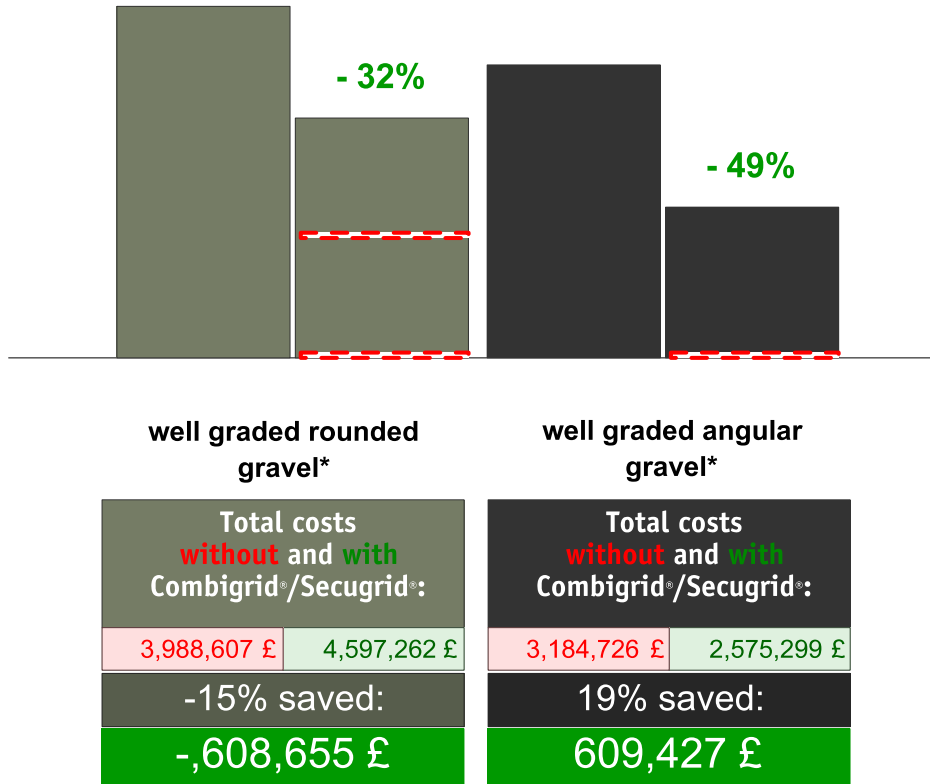
well graded rounded gravel:	soil excavation d ₂	removal d ₂	gravel	Geogrid *
without Combigrid® / Secugrid®	816,820 £	0 £	3,171,787 £	
with Combigrid® / Secugrid®	557,512 £	0 £	2,164,870 £	1,874,880 £
well graded angular gravel:	soil excavation d ₂	removal d ₂	crushed gravel	Geogrid *
without Combigrid® / Secugrid®	680,684 £	0 £	2,504,042 £	
with Combigrid® / Secugrid®	350,066 £	0 £	1,287,793 £	937,440 £

* Material for overlaps and loss due to cutting are not included



Comparison of base course layers
without Combigr[®] / Secugrid[®] and **with** Combigr[®] / Secugrid[®]:

Reinforced with

Geogrid



Recommended products:

Intermediate layer: **Secugrid[®] 30/30 Q1**

Bottom layer: **Combigr[®] 30/30 Q1 151 GRK3 or Secugrid[®] 30/30 Q1**

The selected geogrid types are an estimated recommendation. Project specific conditions might request a proper design. In this case please contact NAUE Geosynthetics Ltd. (tel: 01925 810280; email: enquiries@naue.co.uk).

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