Dr. Peter Waibel ZT-GmbH



## REPOWERING WIND PARK PANNONIA GOLS

Client: Windpark Pannonia Gols GmbH / Windpark Mönchhof GmbH

Development Period: 2019 to 2020

## THE PROJECT \_\_\_

In the municipal area of Gols and Mönchhof (regional district of Neusiedl am See, Burgenland), 25 wind power stations with a nominal capacity of 2.0 MW each are being dismantled and 30 new wind power stations with a nominal capacity of 5.5 MW each newly built in the context of this project. Hence, the installed power increases from 50 MW to 165 MW.

## OUR FUNCTION \_

For this project, BGG Consult was responsible for the geotechnical investigation of the underground and the compilation of Geotechnical Expert's Reports regarding the dismantling and the building of the facilities as well as regarding the reutilisation of the excavated soil material. This included proposals for the different foundation and soil improvement methods, depending on the underground situation at each individual location.

In the further course of the design phase, consultancy services were provided for the special heavy construction measures and the checking of the foundation calculations.

During implementation, the foundation works and the road construction were accompanied from a geotechnical point of view.

Comprehensive Handling of the Geotechnical Field:

The underground investigation works and laboratory tests comprised the following services:

- o Core drillings, cone penetration tests, dynamic probings, exploratory pits at all new power stations
- o 123 exploratory pits at the crane manipulation areas and cover fill of existing facilities and at existing roads
- Seismic refraction profiles
- Dynamic load plate tests on existing roads and crane manipulation areas
- o Soil mechanical analyses regarding the reutilisation of excavated material and regarding the new wind power stations
- o Soil chemical investigations according to the recycling regulation, the landfill regulation, federal waste management plan and in view of concrete aggressivity
- o Groundwater analyses (concrete aggressivity)

All of these investigations were included in the contract for the geotechnical services. Hence, the administrative effort for the client was minimized and the cost effectivity increased.



Prepared contact surface after soil improvement by means of grouted gravel piles

Reference Sheet November 2020