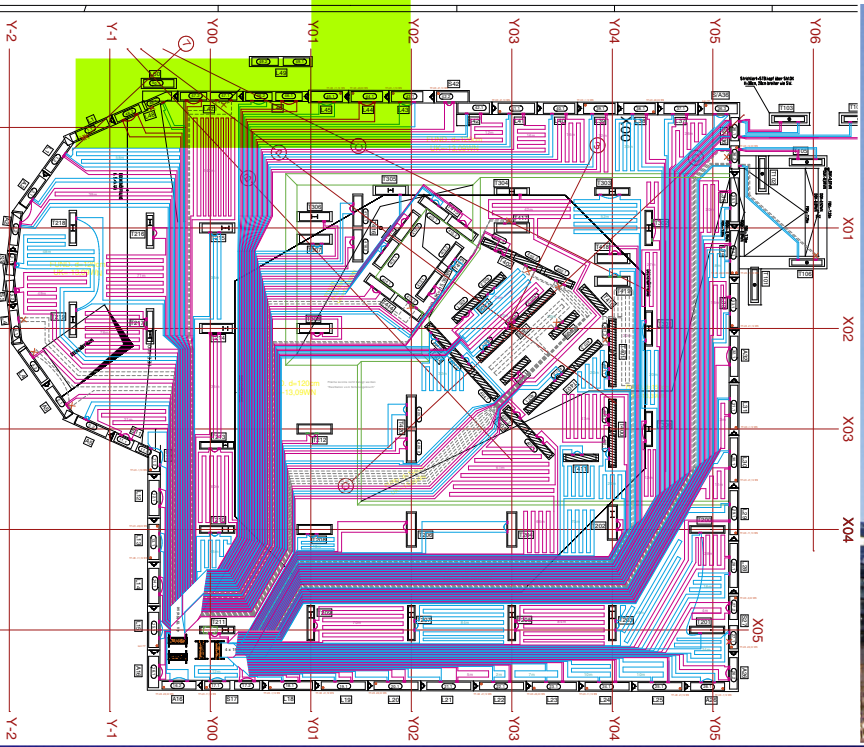
ENERCRET

Geothermal and geosolar solutions for heating and cooling

of buildings for more than 30 years

»GEOTHERMAL MILE« VIENNA, AUSTRIA



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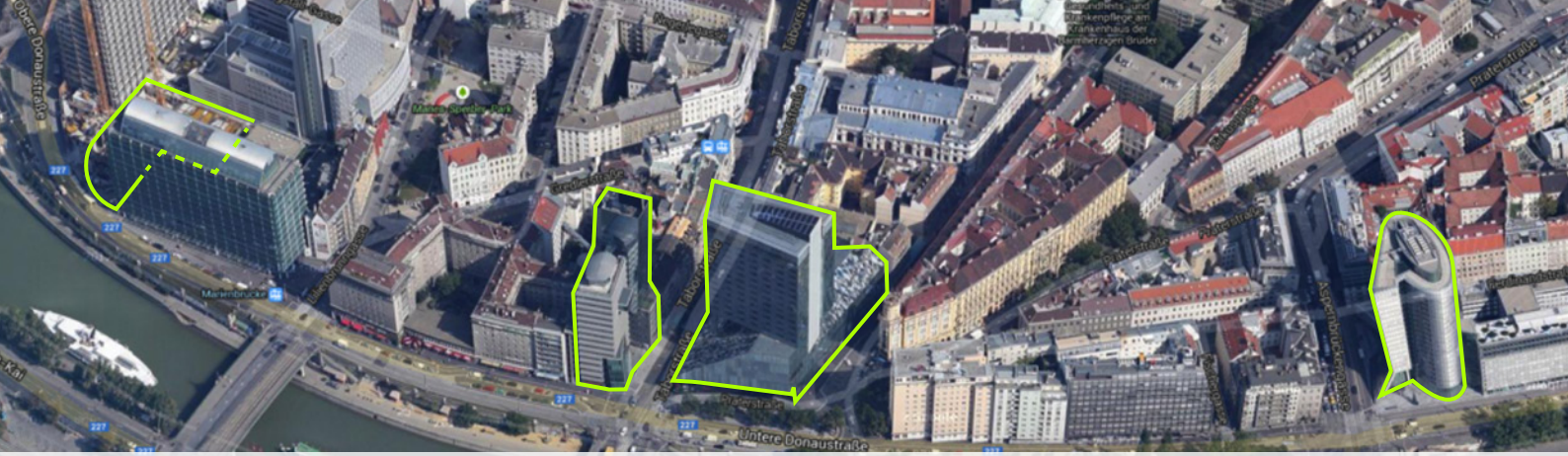


The raiffeisen headquarters, the news tower, the nouvel-tower with the hotel sofitel vienna and the uniqazentrale geothermal energy for heating and cooling and form the world's first »geothermal mile«.

# ENERCRET

## SOLUTION

In each of the four prestige buildings, the diaphragm wall, which was required for structural excavation due to structural reasons, as well as some of the floor slab and foundation piles, was equipped with pipes and thus activated as an absorber.

| | | |
|---|---|---|
| COOLING CAPACITY | 1582 | kW |
| HEATING CAPACITY | 1812 | kW |
| EFFECTS/YEAR | 1816 | MWh |
| HEAT/YEAR | 2696 | MWh |

## PRODUCT

In each of the four buildings, as much heat as possible is removed from the surrounding soil via the statically required, earth-contacting concrete components in winter and returned to the subsoil in the summer cooling operation. The enormous short-term peak loads can not be fully provided by the geothermal plants, geothermal heat is therefore each a base load covered. ENERCRET carried out the planning, simulation and assembly of the geothermal system for all four projects. The special challenge in all four projects was to lay the pipelines on schedule despite the tight space, so that no delays in the construction process occurred.

## TOOLS

In diaphragm walls with 850 meters total length and

With an average depth of 25 meters, 200 foundation piles and 3500 m2 of floor slab, 224,000 meters of HDPE pipes serve as heat exchangers for heating and cooling the four buildings.

CUSTOMER

RAIFFEISEN CENTRAL STRABAG AG,VIENNA (A) NEWS-TOWER:
ERSTE ALLGEMEINE VERSICHERUNGS AG, WIEN (A)
NOUVEL-TOWER:
INSOND SPEZIALTIEFBAU GMBH, WIEN (A)
UNIQAZENTRALE:
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UNIQAZENTRALE:
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CONSUMER PLANNING

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ALTHERM ENGINEERING GMBH, BADEN (A)
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