Task

Greywater and Rainfall recycling

Waste water treatment by using plant-based techniques



Location

FLOWER-OF-SEVEN-COLOURS KINDERGARTEN Hungary, Budapest, Egressy road 180-184.

Mechanical designer:



Joseph Pal

Before



Lawn to be watered: ~1.000 m²

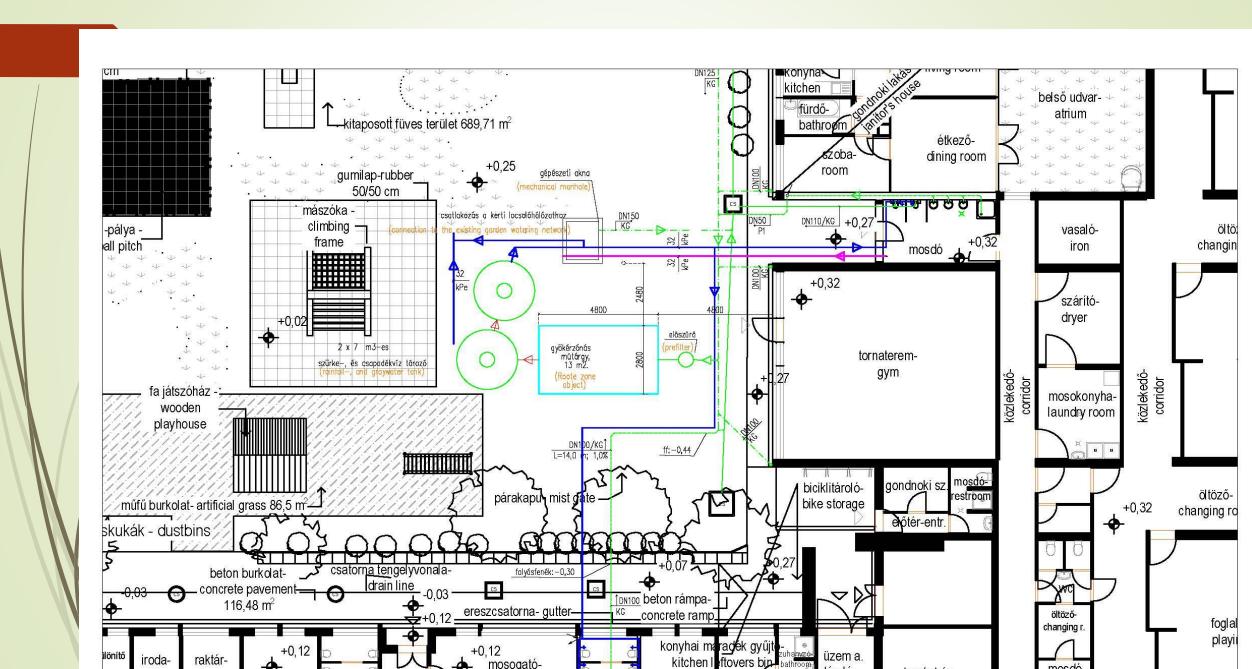
meanwhile



After

Waters to be collected:

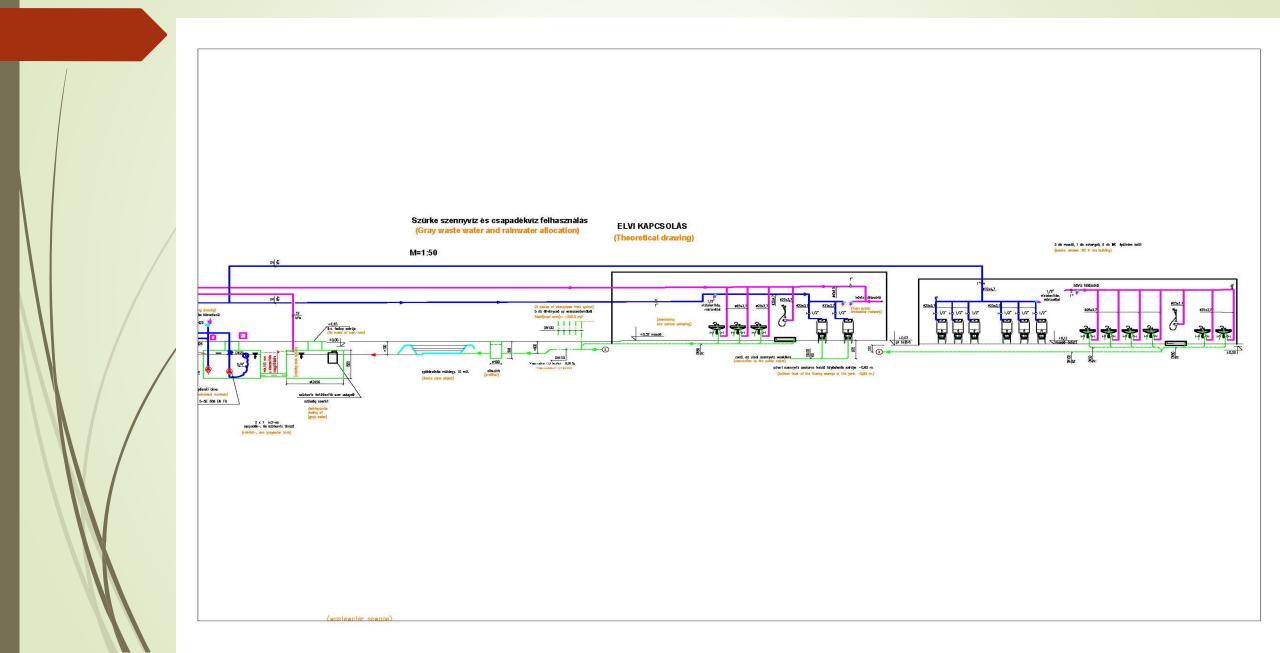
- 1.) Gray waste water from an indoor sanitary blokk, which contains:
- nine washbasins and two showers.
- 2.) Rainfall from the roof. Roof area: 200,0 m2.



A sanitary blokk



Theoratical drawing of sanitary blocks and rain water collecting



Waste water treatment

We use a root zone cleaning system for cleaning of the gray and rain waste waters. The system is the product of the Hidro-consulting Ltd, Pécs, Hungary. See: www.hidroconsulting.hu; or www.gyokerzonas.hu or https://hidroconsulting.hu/hir/termeszetkozeli-szennyviztisztitas; with references.

Fields of use

We use the gray water

- 1) for WC flushing indoor,
- 2) for watering in the garden.

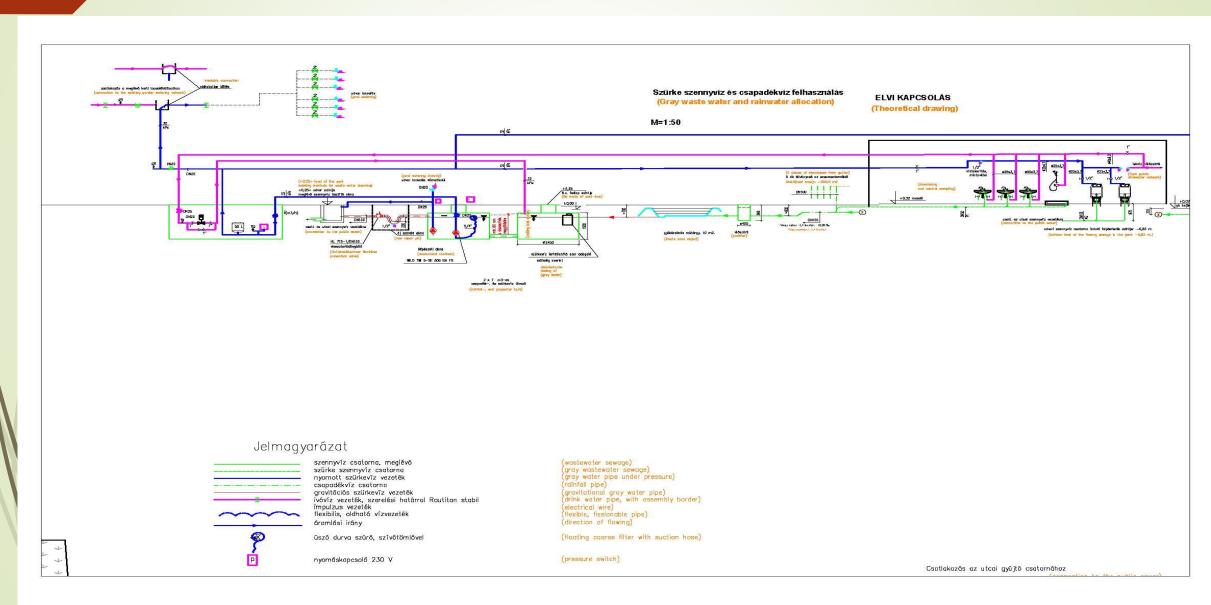
The unnecessary amounts of water flows into the public sewage.

Technological chain

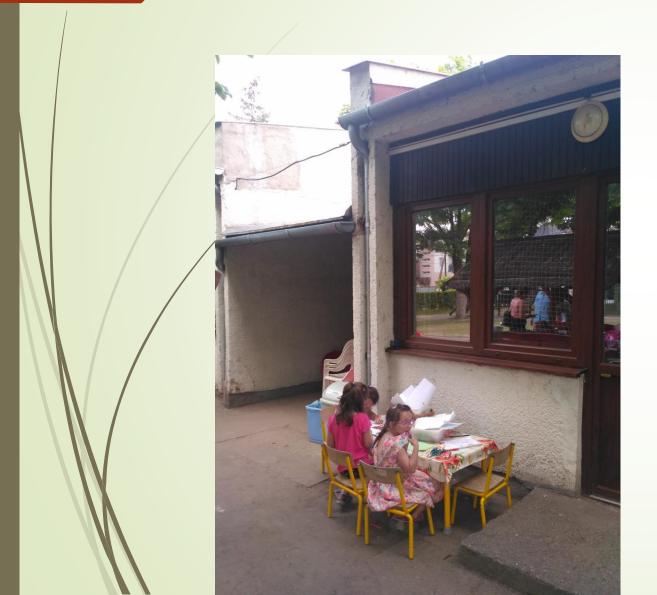
→ WC flushing

gray waste water + rain water → root zone → gray water <

→ garden watering



Sense of the project: the future



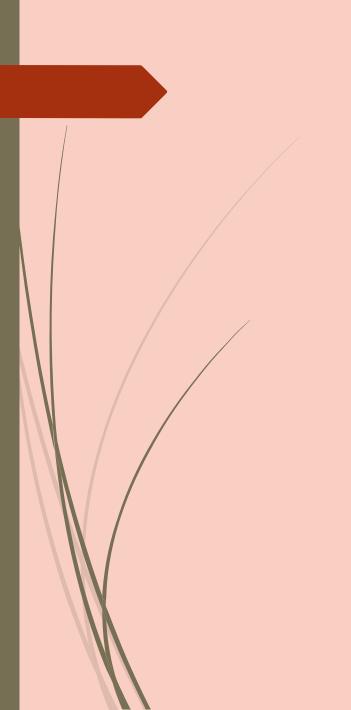


Many thanks for Your attention!

This is the end of this lecture

but not the projects





To be continued...