

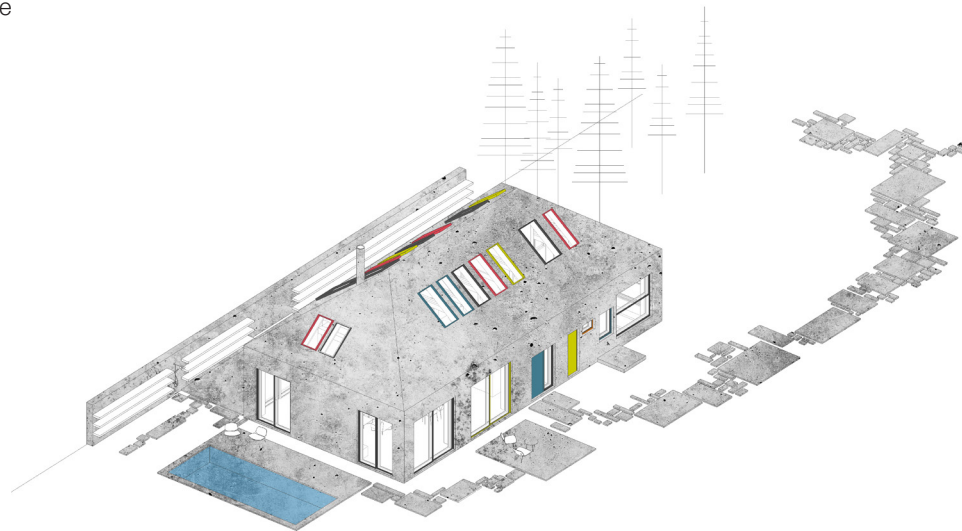
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POLTAVA IN PINE FOREST

program: custom home, landscape preservation
location: Poltava, Ukraine
basics: recycling & readapting of CDW
area: 221 sq.m.
year: 2017 - 2019
in team with: -

The house is oriented on inside - family, slow lifestyle, healthy climate - and outside - forest, preservation of landscape, living in harmony with nature, minimal environmental footprint. The design provides a spacious but compact space for 4 members family with natural ventilation, heating and cooling through inner gardens. The design adapts recycling and reusing of reclaimed materials and construction and demolition waste (CDW) to reduce the environmental impact. The possibility to use salvaged windows, doors and glazing systems is harmoniously implemented into minimal and ascetic design, both inside and outside, as well as into resilient architectural assembly. The house is located in the old pine forest that allows a little light to come through. The maximum amount of existing trees have been preserved. Dark building envelope secures light absorption and reduces heating through cold winter months. At the same time, the house is protected from the summer heat by the high pine tree forest. Vertical vegetable garden is located in the most exposed to the sun area.



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INTEGRATION OF THE BUILDING INTO LANDSCAPE PRESERVATION OF THE LANDSCAPE

SITE PLAN & ROOF PLAN

P - Parking spot for 2-3 vehicles

W1 - Access to water tank pump and water storage tank

W2 - Water pump

W3 - Water storage tank

L1 - Existing landscape and greenery

L2 - Sacrificed landscape

L3 - New landscaping

L4 - Hydroponic vertical vegetable garden

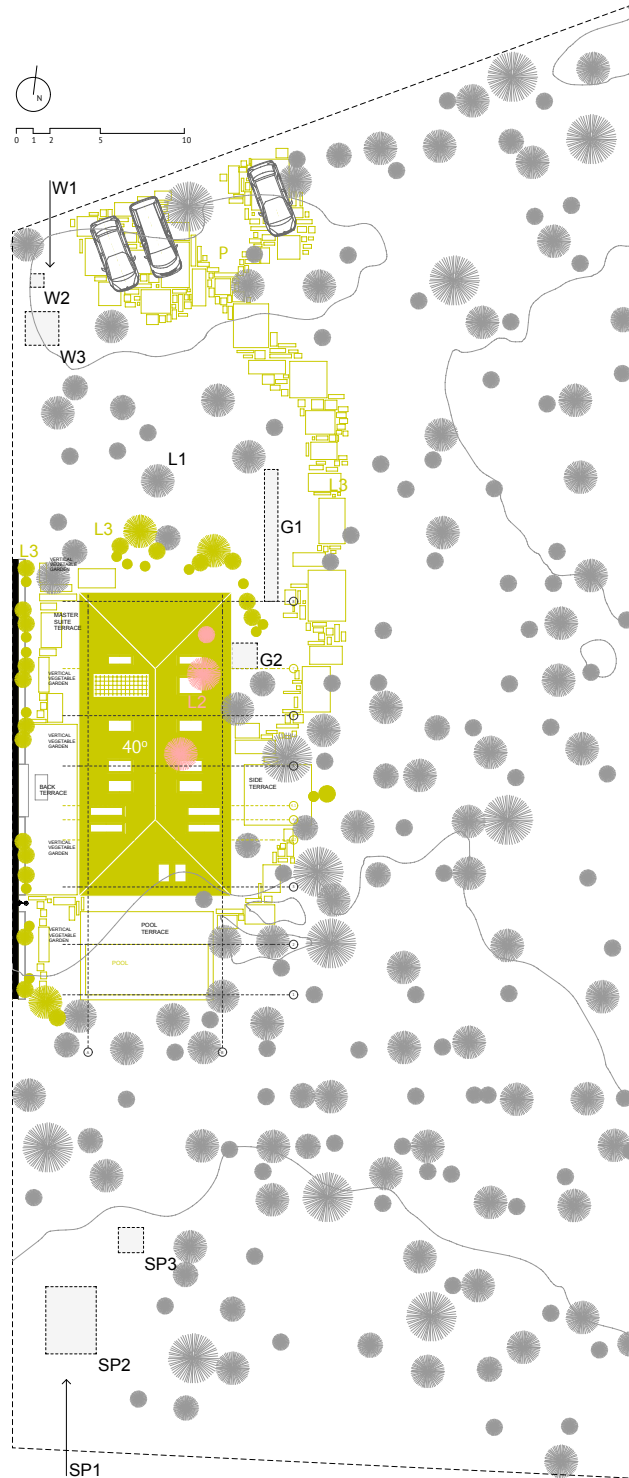
G1 - Geothermal field

G2 - Geothermal pump and well

SP1 - Access to septic system

SP2 - Septic field

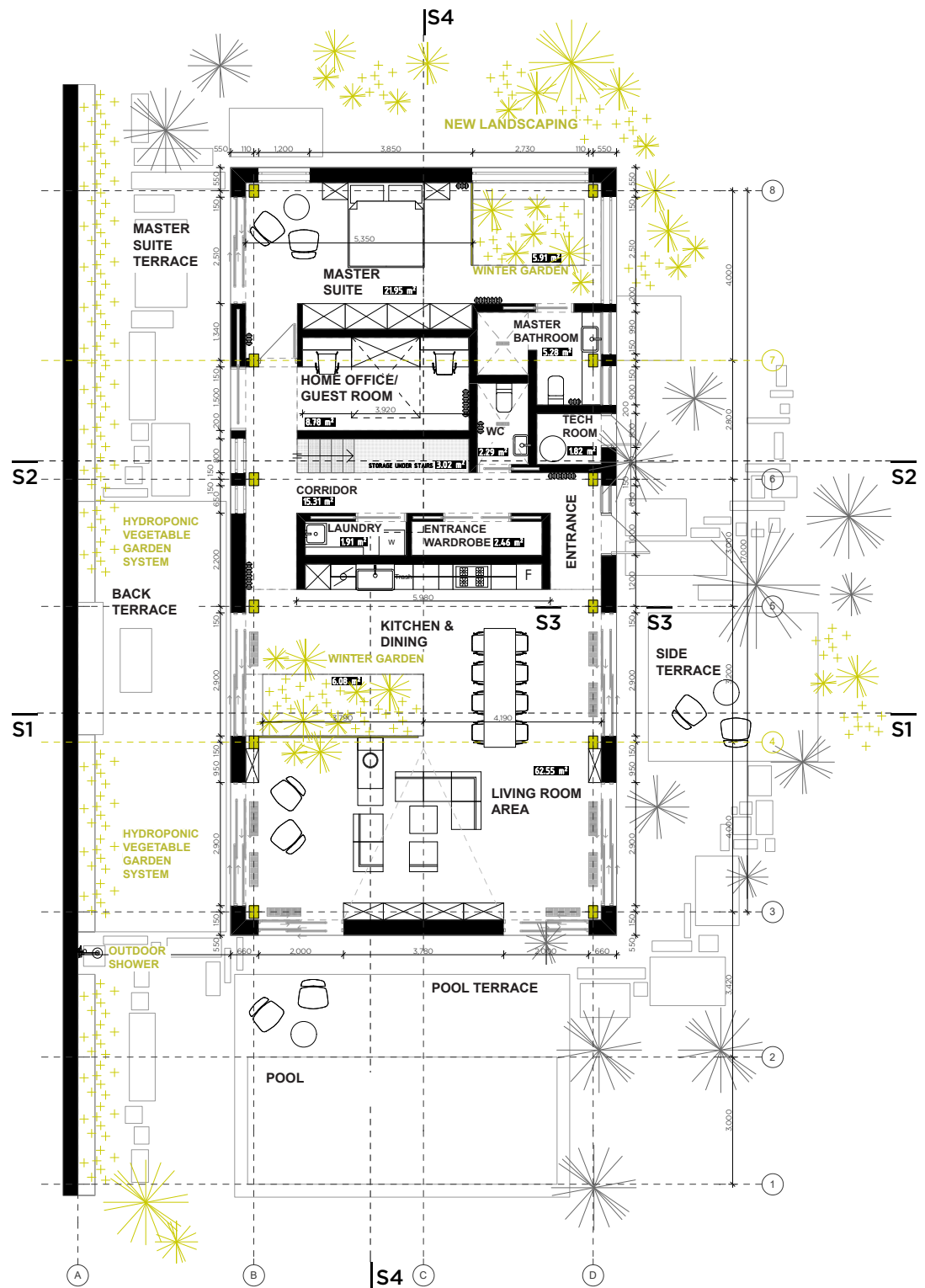
SP3 - Septic pump

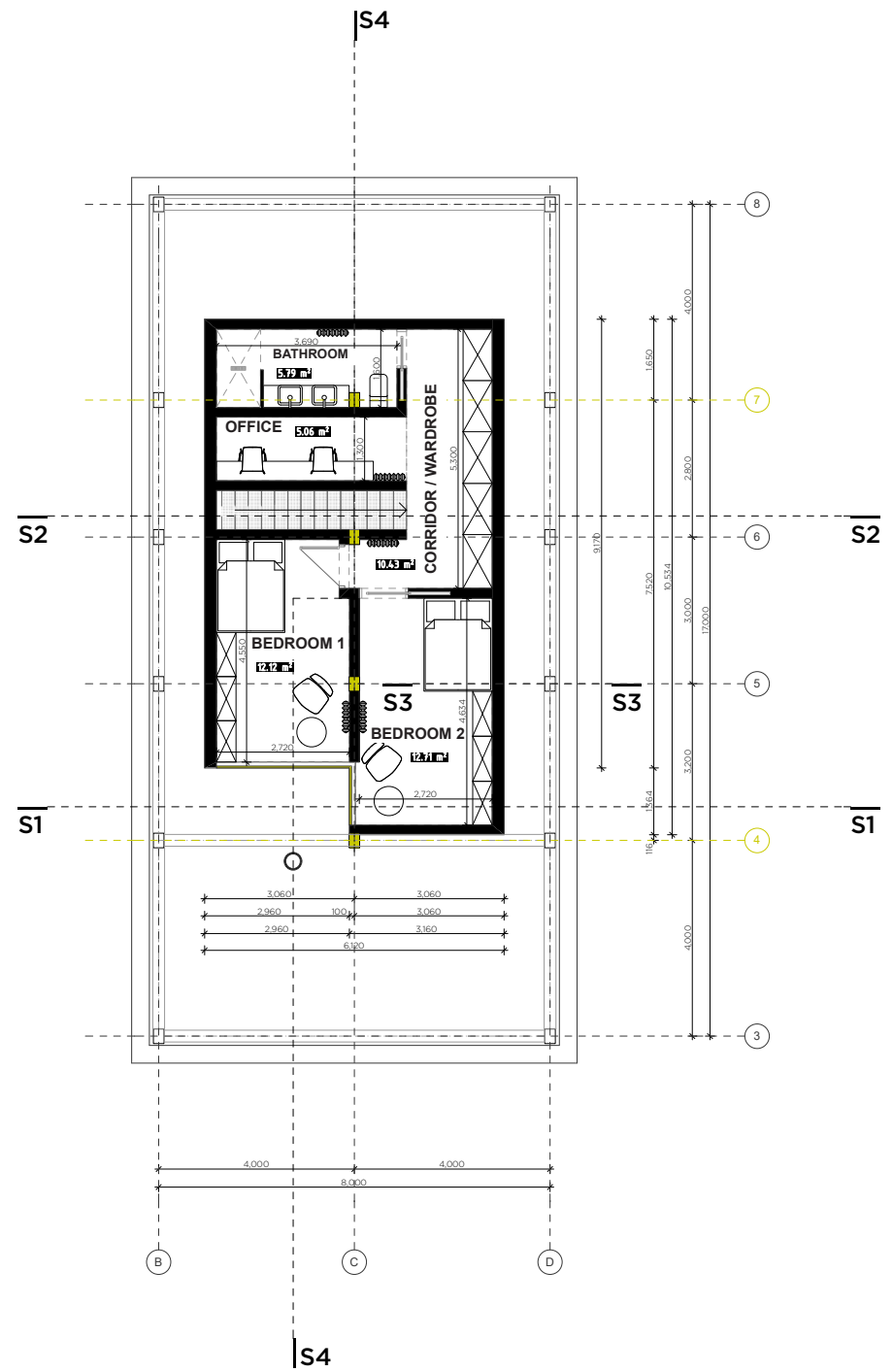


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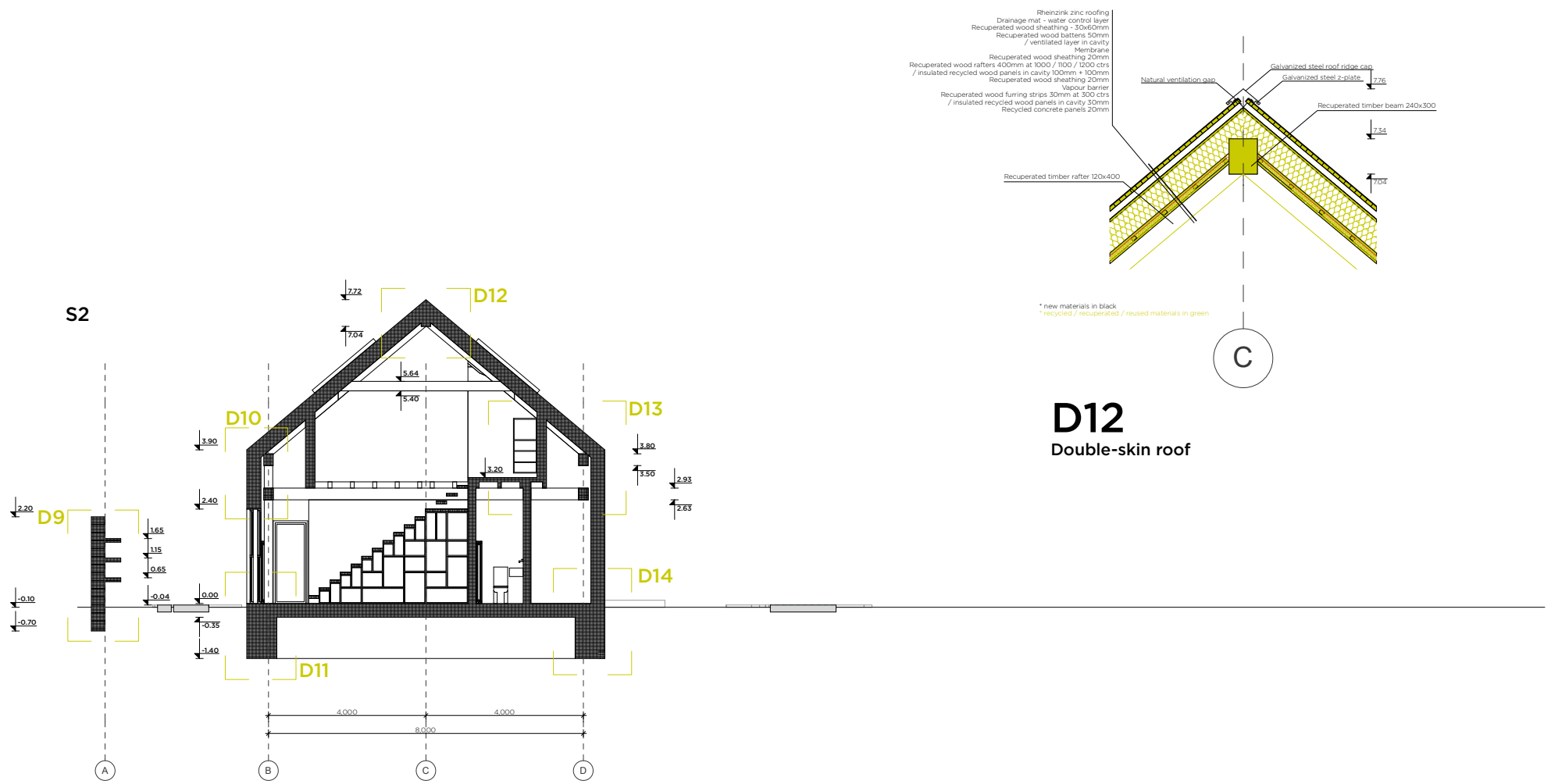




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D1
Double-skin roof
Structural wood assembly
Sliding door
Winter garden skylight

SECTION 2-2. SCALE 1 : 150
 DETAIL 12. SCALE 1 : 50



Rain water management inside building envelope

