

COIGNIÈRES, FRANCE

Redevelopment of a residential parking area



Industry: Site development
Sub-industry: Stormwater management
Location: Coignères, France
Product: OSMORIA™ Indigreen®

Overview

Seqens, a social housing provider, aimed to redevelop the outdoor space of the Acacias residence, a public housing complex in Coignères, to offer residents a more pleasant living environment.

Challenge

As a “pilot project,” the project included the complete renovation of pedestrian pathways and outdoor lighting, the restructuring of green spaces, and the improvement of parking availability in the neighborhood. The redevelopment of parking areas aimed to increase the number of available parking spaces by 2.5 times and integrate rainwater management by reducing surface impermeability.

The 340 parking spaces were equipped with our OSMORIA Indigreen depolluting aquatextile, placed beneath permeable surfaces made of cellular paving slabs and concrete pavers.

CASE STUDY

Redevelopment of a residential parking area

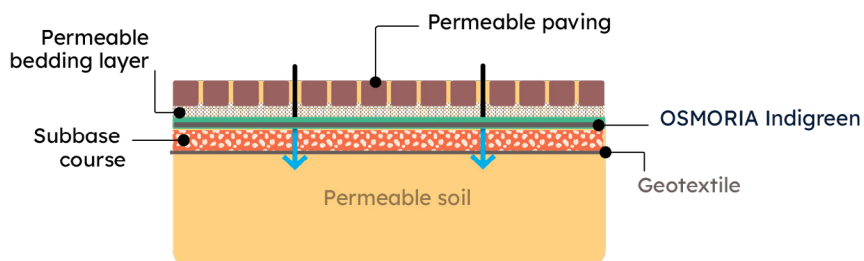


Solution

The 340 parking spaces were equipped with our OSMORIA Indigreen depolluting aquatextile, placed beneath permeable surfaces made of cellular paving slabs and concrete pavers. The OSMORIA Indigreen aquatextile, installed under the bedding layer, manages both diffuse hydrocarbon pollution, including PAHs (from chronic oil leaks), and localized accidental pollution (such as illegal oil dumping), then infiltrates the depolluted water. With a permeability greater than $10 \cdot 10^{-2}$ m/s, the aquatextile instantly infiltrates water and irreversibly captures more than 99.5% of the hydrocarbons passing through it. By providing mineral nutrients through the

aquatextile filaments, microorganisms present in the soil and water quickly colonize its porous structure to systematically and rapidly degrade the captured hydrocarbons, thus protecting the soil from pollution.

The aquatextile is autonomous, durable, and maintenance-free. OSMORIA Indigreen provides an easy and cost-effective solution (less than €2 per parking space per year) for hydrocarbon treatment while protecting the environment. It is specifically designed to handle pollution from light and heavy vehicles parked on mineral or vegetated permeable surfaces. Its mechanical properties are optimized for this application, with a tensile strength of ≥ 20 kN/m (equivalent to a class 6 geotextile).



Pavement with permeable surface (mineral) on permeable soil

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