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Redesign Lanferbach,
Gelsenkirchen

Client:

Emschergenossenschaft

Water and landscape design:

Atelier Dreiseitl

Planning and design:

1994–1998

Construction: 1999

Size: 32,000 m²

Length: 800 m

Site area: 12 ha

Residents: 1,900

Annual rainfall:

775–800 mm

Rainfall intensity: $r_{15(1)}$

115 l/s/ha

Drainage method:

Constructed swales and
trenches, infiltration basins

Soil permeability factor:

1×10^{-5} m/s

Infiltration and retention area: 4,000 m²

Release rate:

Mean rate = 7.5 l/s

Maximum rate = 76.1 l/s



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Estate 'Hameau de la
Fontaine', Echallens,
Switzerland

Client: Theiler & Partner,

Murten

Water and landscape design:

Atelier Dreiseitl

Architects: Theiler & Partner

Planning and design:

1981–1984

Construction: 1982–1986

Size: 50,000 m²

Length: 80 m permanent

watercourses

Water surface: 350 m²

Total water volume: 250 m³

Flow rate: 300 l/min

Maximum water depth:

120 cm pond

Minimum water depth:

5 cm channel

Cistern volume: 5 m³

Water treatment:

Purification biotope

100 m² surface area

Pump power: 0.75 kW

Roof area: 2,200 m²

Residents: 250

Impermeable surface: 60 %

Annual rainfall: 850 mm

Drainage method:

Surface drains, retention

pond, drainage into stream



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Business park Krems-Ost,
Austria

Client:

Magistrat der Stadt Krems

Rainwater management:

Atelier Dreiseitl

Street planning:

IB Spindelberger

Planning and design:

1995–1996

Construction: 1996–1998

Site area: 330,000 m²

Impermeable surface in

business park: 80 – 90 %

Annual rainfall: 800 mm

Rainfall intensity: $r_{15(1)}$

83 l/s/ha

Drainage method:

Infiltration swales and basins

Soil permeability

factor: 1×10^{-3} m/s

Infiltration and retention

area: 3,280 m²

Stormwater event: 5 years



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BUGA 97 Phenomena in
cooling tower

Client: Bundesgarten-

schau 97 GmbH

Artistic concept:

Herbert Dreiseitl

Design: Atelier Dreiseitl

Architects:

PASD Feldmeier & Wrede

Structural engineers:

IPP Polonyi & Partner

Consultants: Institut für

Strömungswissenschaften,

FH Konstanz, Max Planck

Institut Göttingen

Planning and design:

1994–1996

Construction: 1997

Tower height: 28 m

Visitor platform: approx.

300 m²

Flow rate:

200 m³/hr. (maximum)

Pump power: 5 kW



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Hølaløkka-Alna, Oslo,
Norway

Client: Water department,

City of Oslo

Landscape design:

Atelier Dreiseitl,

13.3 Multiconsult

Water design:

Atelier Dreiseitl,

13.3 Multiconsult

Calculations: Interconsult

Planning and design:

2003–2004

Construction: 2004–2005

Site area: 30,000 m²

Length: 500 m

Annual rainfall: 680 mm

Rainfall intensity: $r_{15(1)}$

3.5 l/s/ha

Drainage method:

Drainage swale and ditch,

infiltration swale

Release rate:

Phase 1 - 120-150 l/s

Phase 2 - 200-800 l/s

Water treatment:

Cleansing biotope, settling

pond

Soil permeability factor:

5×10^{-4} m/s

Stormwater event: Swale

capacity for 2 year event

Retention volume for 5 year

event

Cleansing biotope area:

700 m²

Retention area: Stormwater

wetland 1,600 m²

Swimming pond 3,000 m²