

District of Sooke – Regional Innovative Rainwater Management Examples

The Meadows – 10520 McDonald Park Road

Type of Project: **Residential – Townhouses, Single Family & Apartment**

RAINWATER MANAGEMENT TECHNIQUES USED:

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> permeable surfaces | <input type="checkbox"/> greenroofs | <input checked="" type="checkbox"/> reduced footprint |
| <input checked="" type="checkbox"/> bioswales | <input type="checkbox"/> roof storage | <input checked="" type="checkbox"/> underground storage |
| <input type="checkbox"/> raingardens | <input type="checkbox"/> rainwater harvesting, reuse | <input type="checkbox"/> naturescaping or restoration |

Municipality: Central Saanich
Public Access: No. Some aspects visible from public sidewalk.
Size : 59 single family houses, 20 townhouses, apartment building
Type: New
Ownership: Private
Completed : Winter/spring 2008

Rainwater Management Techniques Used:

Bioswales: 13 vegetated bio-retention cells with orifice controlled under drains. Cells are 1m deep, filled with modified soils, the top 200mm of which permit surface detention, the bottom 800mm of which have 30% void space. Cells make up an area of 1444 m².

Underground Storage: Below the bioswales

Permeable Pavement: Unit pavers used for all surface parking.

Reduced Footprint: Narrow streets and very short driveways reduce impervious cover.

Disconnected Downspouts: Stormwater is directed to bioswales.

Location on Site: Dispersed throughout site.

Impervious Area Managed: 10,349 m²

Design Storm Used: If flows are directed properly to rain gardens, flows from site will be less than existing condition for all rain events up to a 100 year storm.

Other Notes: Tight clay soils allow little infiltration, so underground detention is required. Soil in non-bioswale open space was amended with organic matter to 500 mm to permit deep rainwater retention and good root growth. Phase II of the development will see a larger raingarden system and enlargement of Phase I pond.

Cost: Not available

Funding: Private

Awards: -

Project Team:

Landscape Architect - Murdoch de Greeff Landscape Architects Inc., 412-2891, www.mdidesign.ca/index.htm
Civil Engineer - RCL Consulting Ltd., 477-7003 & Hoel Engineering Ltd., 475-6906 www.hoel.bc.ca/
Architect - Praxis Architect Inc., 475-2702, www.praxisarchitectsinc.com/home.html

