

City of Vancouver: Country Lanes

2003 APWA Technical Innovation Award Winner

Honourable Mention for 2003 CAMA Environmental Award

The City of Vancouver has developed an environmentally sustainable 'Country Lane' design that makes back lanes greener and more attractive. Three 'Country Lanes' were constructed by August 2003 as part of a demonstration project. This alternative to full width asphalt lane paving is in response to the City's goal to reduce environmental impacts and to create a more liveable community.

Country Lanes feature two narrow driving strips surrounded by a structural component that is topsoiled and planted with grass. This structural grass is a rigid plastic grid that can support vehicles and prevent grass roots from being compacted and rutting the soil. Two of the three lanes used driving strips built out of concrete, while one lane used permeable driving strips built out of the structural grass grid infilled with small gravel. The road base is a mixture of aggregate, which provides structural stability, and a sand/soil mixture that allows for drainage and provides the soil components required for grass growth. This structural soil was developed by City of Vancouver staff.



The Country Lane design will allow rainwater to percolate over vegetation and through the ground. The natural absorption allowed by this permeable lane surface reduces discharge into the storm sewer system, recharges groundwater, and reduces peak flows into rivers. The increased vegetation will filter stormwater and improve air quality. Aside from the environmental aspects, this innovative sustainable design also has many other advantages including traffic calming, as well as being aesthetically pleasing.