

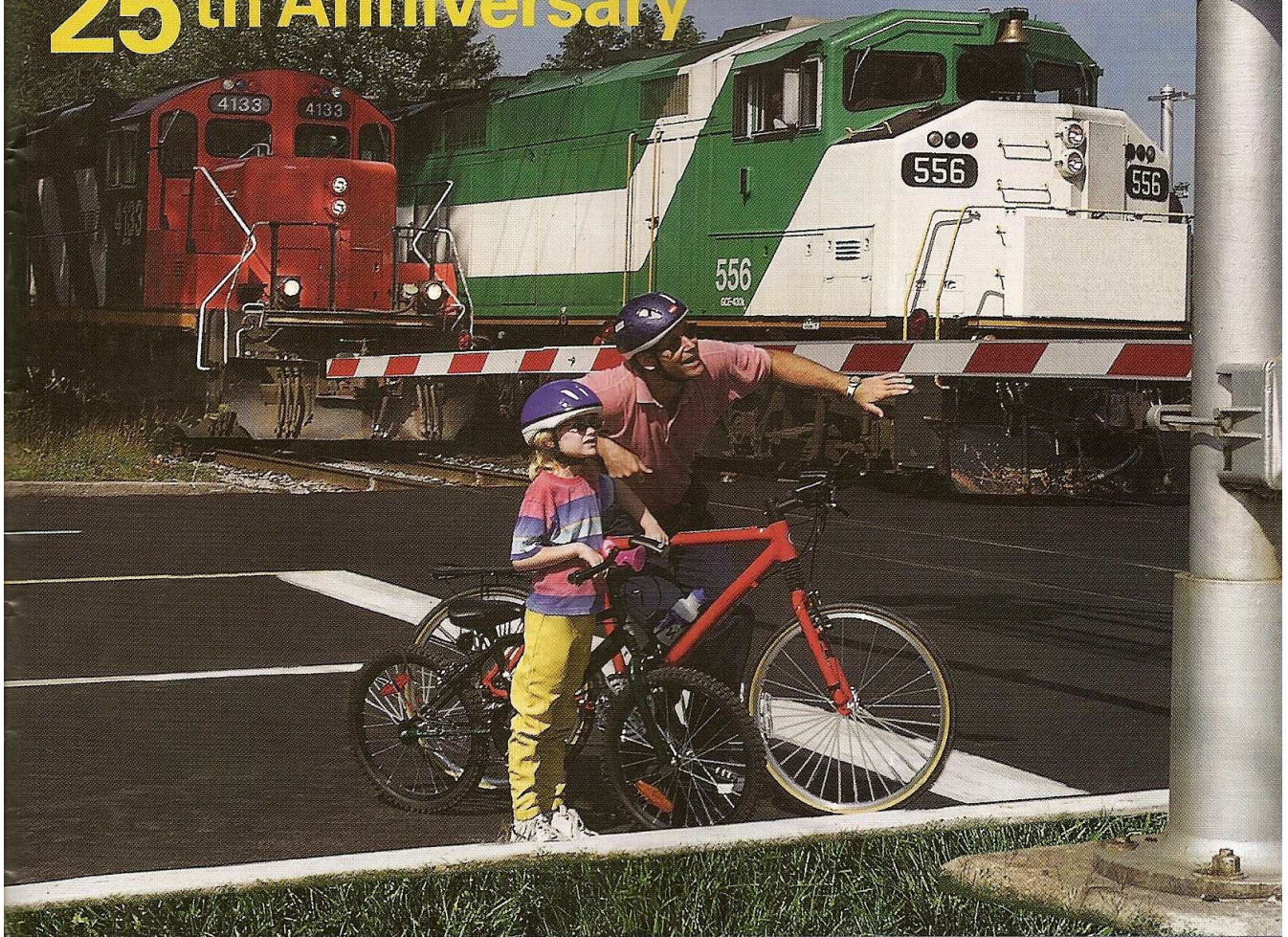
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# Interchange

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## Operation Lifesaver's 25th Anniversary



RAC ACFC

## Proximity Initiatives

# Glass Walls and Living Walls:

Sound barriers are becoming a little more interesting . . . and easier to look at

By Kayla Hounsell

**WALLS AREN'T USUALLY ALIVE.** They don't grow, look pretty, help the environment, or absorb sound. But this one does.

A German-based company that can help railway/municipality relations has come to Canada. The Living Wall: An Ecological Sound Barrier Solution Inc. in Toronto could be a solution to blocking train noise from neighbouring communities. The company builds sound barriers made of vegetation.

"When you drive by it, or a train goes by, it'll look like a forest," says Anthony Biglieri, president and director of marketing for The Living Wall. "That's the beauty of it, and that's what I really like about it."

But looking good is not the only solution The Living Wall provides. "Not only does it keep noise out, it absorbs noise as well," says Biglieri, who is an urban planner by trade.

Most sound barriers deflect sound, but the soil in this wall acts as an absorber.

The Living Wall was brought to Canada about eight years ago, but the company is 120 years old. There are already a few prototypes in Quebec, and the group is also looking at a project in Clarington and London. The latest project was built in Whitby last fall, and is a first for Ontario. It took only five to six days to complete, and should be fully vegetated by the end of May. The cost is relatively similar to a concrete wall.

And it's pretty easy to build and maintain. Biglieri says they cut a trench in the earth, and make posts to create the wooden frame. They fasten a thin geotextile inside, over the entire length of the wall. Next they fill the trenches with soil, compact it down, and apply willow shrubs in panels. In a week or two the wall buds. As the vegetation takes root, it forms an integrated unit that is able to withstand harsh weather. After 30 to 40 years, the wood will rot away, and the plants will grow into each other, and stabilize themselves.

The company maintains the wall for the first two years, and then the developer or municipality assumes responsibility, though there isn't much maintaining to be done. The wall is resilient to salt and bugs, and graffiti free. Every year the wall needs to be trimmed on the top and the sides, and it will grow 20 feet (6 m) in the air. Biglieri says the wall needs a water source for the first year or so, but then it establishes itself.

"Technically speaking, it'll last forever," he says. "It'll just keep growing, and that's the beauty of it."

In addition to being aesthetically pleasing and absorbing noise, the wall is ecologically friendly. Biglieri says it has



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several benefits including photosynthesis, pollution filtration, soil stabilization, and its parts are 100 per cent recyclable.

All things combined, the wall could be great for both railways and municipalities. Canada is an increasingly urbanized society and as the country grows, residential development is growing around rail facilities, causing proximity issues, especially noise complaints. The Railway Association of Canada is working closely with the Federation of Canadian Municipalities

fairly quickly, within a month after construction ends. He acknowledges that it will be difficult to do an accurate test at this time because traffic volumes will be lighter due to summer vacations. He says a full set of tests will be done after that through to October.

The test section will also determine whether there will be maintenance problems, such as salt from the highway and dirt from the train tracks. "There are issues of having something that tall and that clear being a magnet for graffiti, which is a real problem for us," says St. Louis.

to find solutions. It may have already found one solution in the Borough of Westmount.

Westmount has an idea that's also new to Canada; a curtain wall that doesn't impede view, and lets light come through. A city councillor got the idea for a glass wall while she was vacationing in Rome.

The 50 m wall will be made of Lexan glass, a type of Plexiglas, supported by metal crossbeams, and will stand on a concrete base just over a metre high. The City was concerned about using a concrete wall since it would be 10-15 feet (3-5 m) from houses; too close for a wall that reaches 22 feet (7 m) at its maximum point.

transparent sound barrier will take about 12 weeks to build at a cost of \$350,000. If the full sound barrier project is ultimately given the go-ahead, it will span 1.6 km at an estimated cost of \$15 million.

St. Louis says the feedback from residents has been extremely good. While he wants to wait until the wall is built to see the real feedback, he is optimistic that residents will be satisfied with the final product. "This will reduce train noise as well as traffic noise," he says. "It should have a significant positive influence on the neighbourhood as a whole." ●

"There are nice views to the south of these streets and they have to be preserved," says City Director General Bruce St. Louis.

The project was started in the early 1990s, when the city received complaints from residents about highway noise, but they also experience train noise, and now the project hopes to combat both.

Construction began on a test section of the wall in March. The foundation has been installed, with hopes to finish the test section by the first week in June. It will be fully functional and eventually become a part of the completed wall.

St. Louis says a number of tests will be done over a period of time,