


HR Green's Context Sensitive Solutions

CSS + *Design Flexibility* = Cost-Effective Project Delivery

Or,
Outside the Box? I didn't know there was a box.

By: John (Jack) Broz, PE

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Project	Major Issues	Construction Value	Re-Design Savings
Detroit Lakes	60 years Railroad Economic Environmental Historic Access Management	\$40MM	N/A
TH 212	60 years Environmental Over designed Under Programmed	\$245MM	\$100MM
Legacy	Lawsuit stopped Construction Environmental	\$330MM	\$80MM
Radio Drive	Multi-Modal CSAH	\$10MM	\$4MM
Richfield	"Complete Street"	\$4MM	\$2MM

Detroit Lakes, MN, Begin Study 2000

- S-Curve near downtown (20 mph)
- Crash History
- Lack of Frontage Roads
- 60 Trains/day
- Back-ups onto TH 10
- Previous Study...
- "Do not look for an underpass"



Traffic, Public Meetings and a Meeting with the Railroad

Unusual traffic patterns led to an Origin-Destination Study

Public comment to move the highway into the Railroad right-of-way

The meeting with the Railroad...

The REAL problem was the concentration of traffic at the RR crossing!





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Context Sensitive Design Training pays off!

“Well, this is the type of thing that they said in CSD training. Let’s keep going and see what they will do in St Paul!”

-Mike Ginnaty, Mn/DOT Project Manager

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Detroit Lakes, MN, Project open to traffic 2008

Underpass separates Roosevelt Avenue from RR and TH 10

City embraces downtown expansion plan

Construction shortened through A+B+C along with incentives



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Shifted RR, Shifted Highway make room for Frontage Rd

Local traffic had been forced to travel on Highway 10, (no frontage road around the lake or near downtown)

Closed 63 out of 70 access points to Highway 10



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Watershed approval? Watershed SUPPORT!



Special Culvert Design and Fish spawning criteria

Historic Character

Depot, Graystone Hotel and Post Office become focal point of new plaza



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Overlook and Railroad create "Pinch Point"

Narrowing of TH 10 allowed the extension of a frontage road with parking for the overlook.

Rain gardens and mechanical water quality treatments



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TH 59 and TH 34 upgrades facilitate traffic flow during construction

Grade crossings upgraded to "whistle-free" criteria



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Connect Detroit Lakes

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