

WestSide (E & N) Rail Trail Project

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Winnipeg, MB

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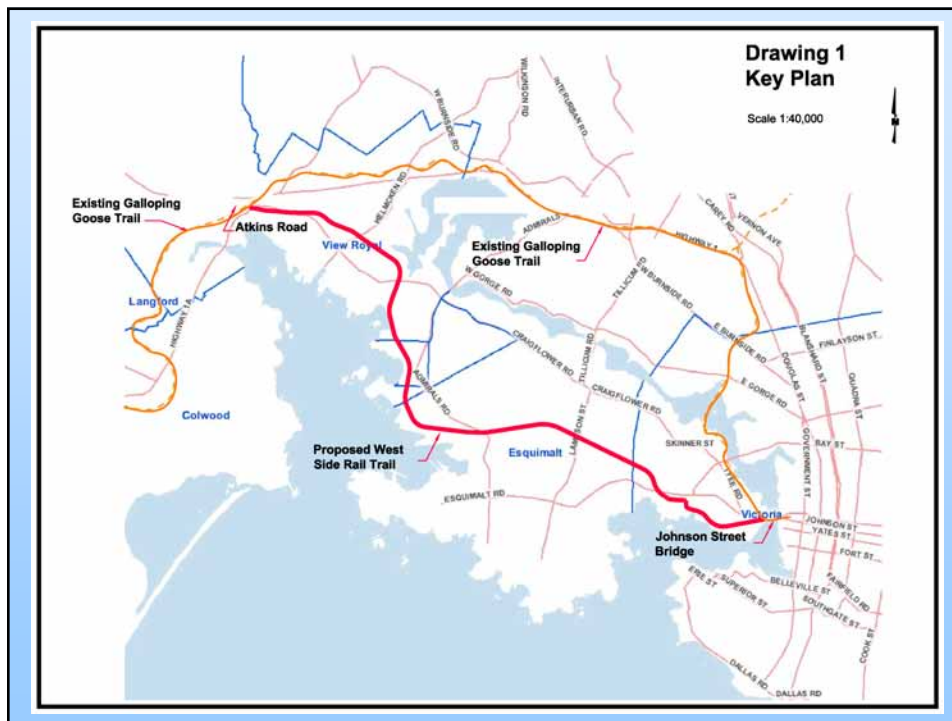
Acknowledgements

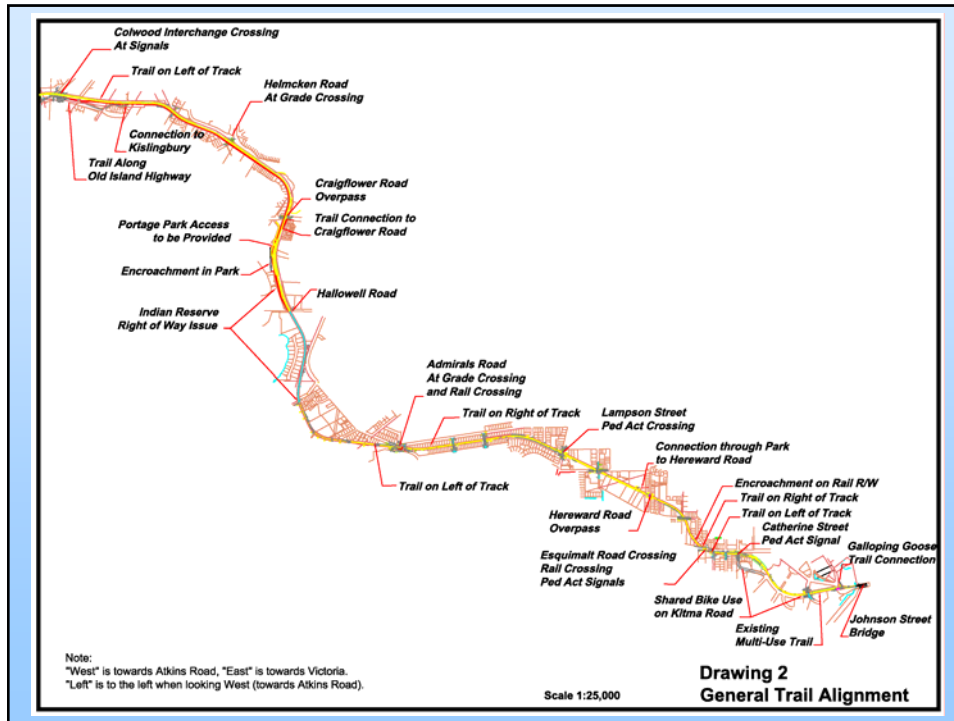
- Focus Intec (Prime Consultant)
- Clients
 - Township of Esquimalt (Lead Client)
 - City of Victoria
 - Town of View Royal

Purpose of Study

The Study was performed to address the key issues of:

- Carrying out a survey of the Right of Way to identify relevant features
- Identifying constraints to implementing a multi-use trail on the E & N Railway Right of Way
- Identifying an appropriate trail design standard and alignment concept
- Identifying an Order of Magnitude cost estimate based on the conceptual design





Existing Rails with Trails

- Length 92 km to 0.6 km
- Length next to a trail 35.5 km to 0.3 km
- Train speed 240 kph to 5 kph
- Corridor width 457 m to 5.5 m
- Separation 30.5 m to 0.6 m
- Rail Crossings 17 to 0
- At-grade crossings 13 to 0

Existing Rails with Trails

- Average length 13.8 km with 6.1 km on rail line
- 64% have active rail lines for > 50% of their length
- Trail widths 1.22 m to 6.1 m - average 3m
- Average separation 10m
- 3/4 of the trails have a barrier
- > 3/4 of the trails cross the tracks - average 3 times
- Average train speed 51.5 km/hr
- > 1/2 of located in Class 1 rail lines

Safety

- Adequate distance between the track and trail
- Adequate grade separation, barrier or fencing
- Well-designed rail crossings
- Adequate signage for trail users

Barriers

- Keep trail users away from the tracks
- Protect trail users from being hit
- Prevent users from throwing things onto the tracks or at the trains
- Discourage the public from getting close to trains

Setback

- 13% have a setback > 2.1 metres (< "Structural Clearance"),
- 13% have a setback of 2.4 - 3.7 metres,
- 23% have as setback of 3.7 – 6.1 metres (50th percentile 6m)
- 27% have a setback of 6.4 – 15 metres,
- 22% have a setback of >15

Trail Width

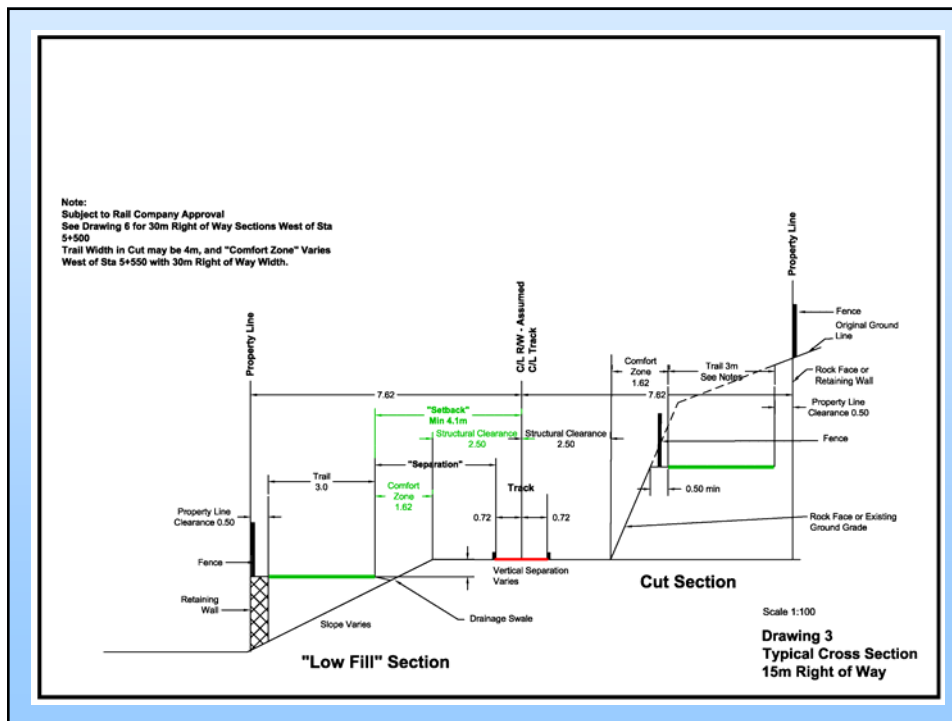
- Minimum 1.5m – One Way Bike Lane
- Minimum 1.8m – Off Road One Way
- Minimum 3.0 – 3.4m – Secondary Bike Path, 2-Way
- Minimum 4m – Multi-Use Trail, 2-Way
- Minimum Clearance 1m each side

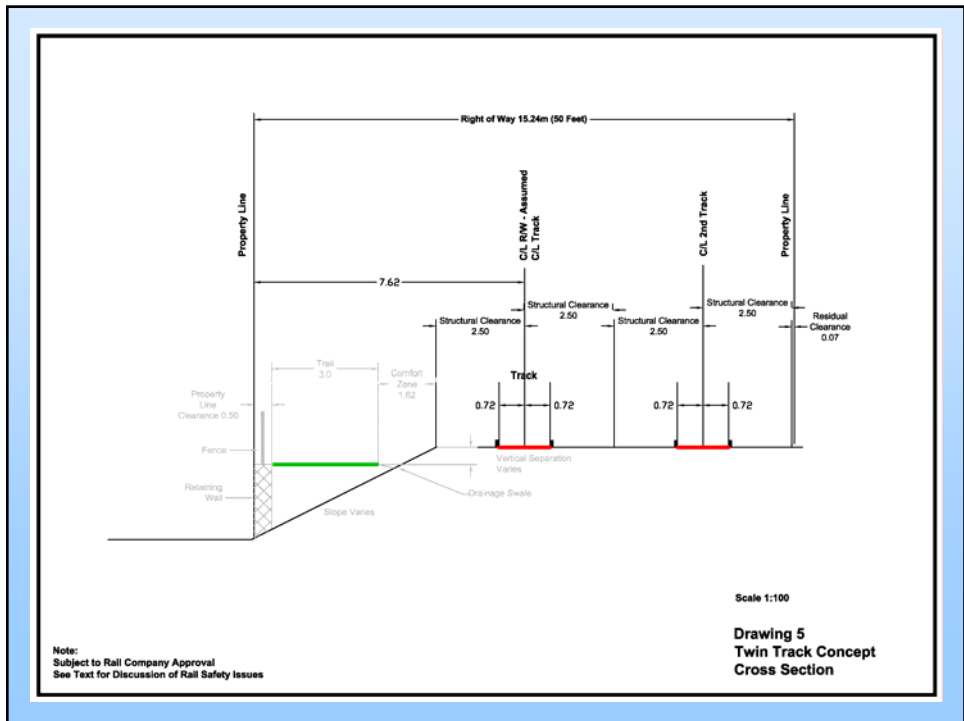
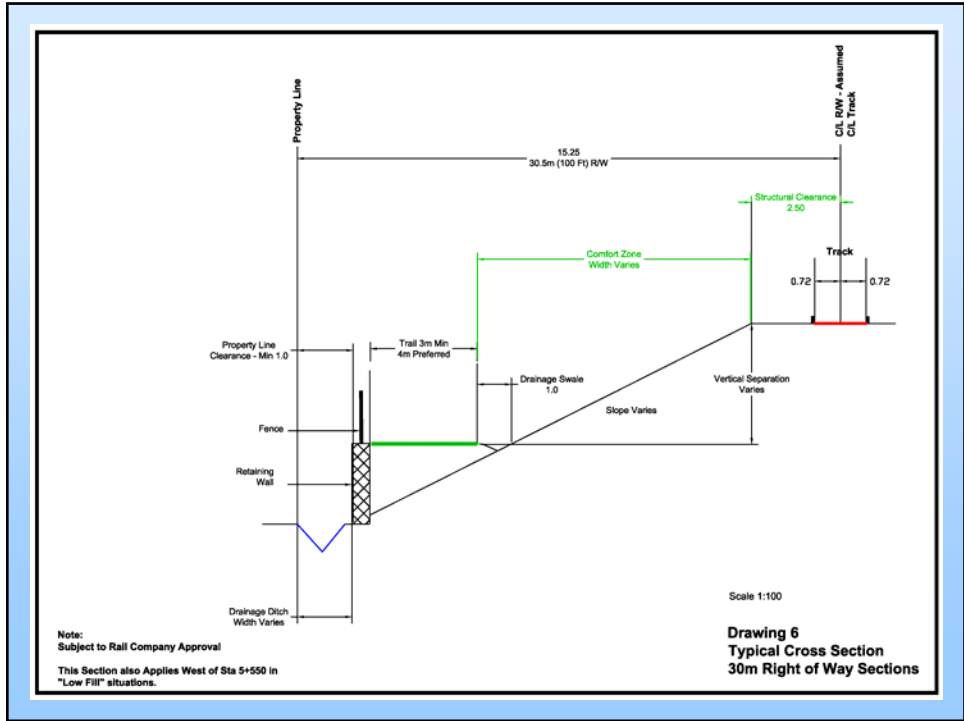
Other Criteria

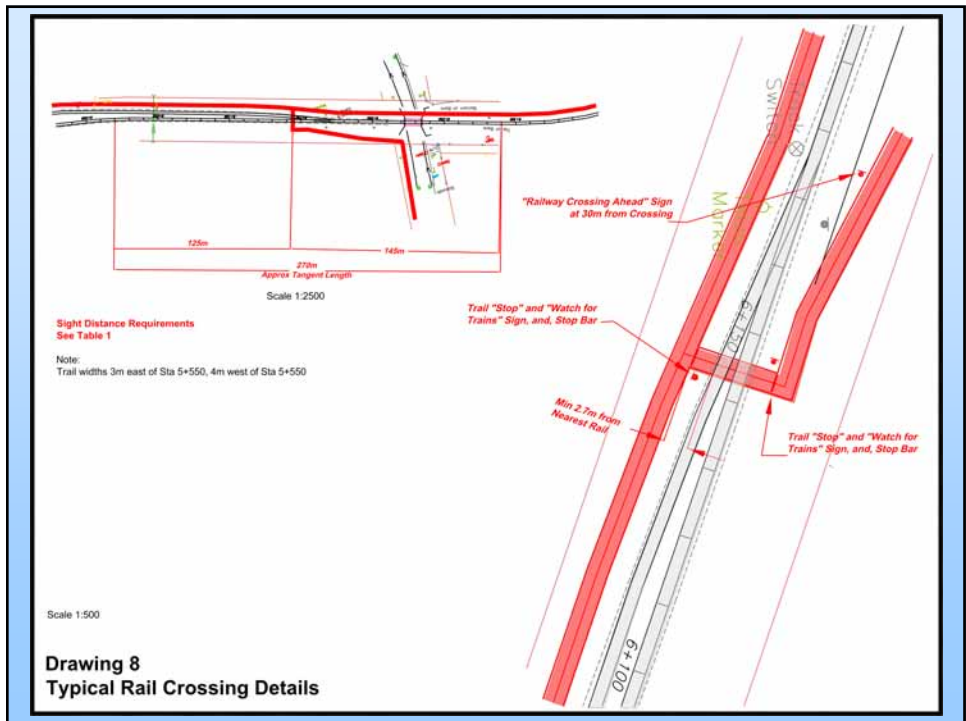
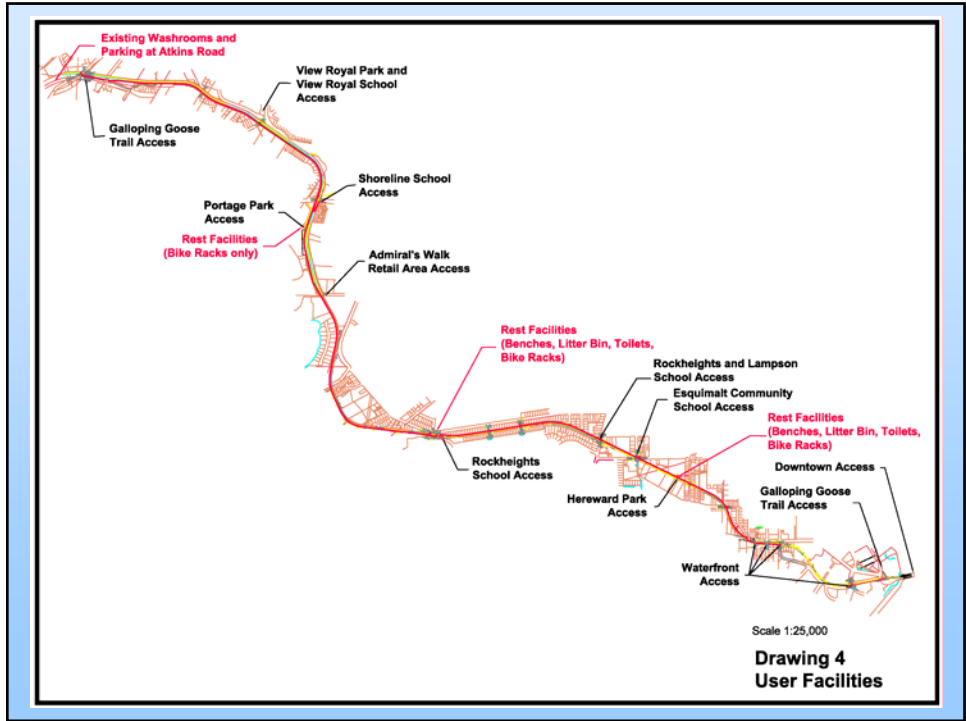
- Sight Distances for bikes and cars
- Track Crossing Angle > 70 degrees
- Railway Structural Clearance > 2.5m
- Comfort Zone 3.5 – 7.5m
- Vertical Clearance Signs > 2.5m, Structures > 3.6m

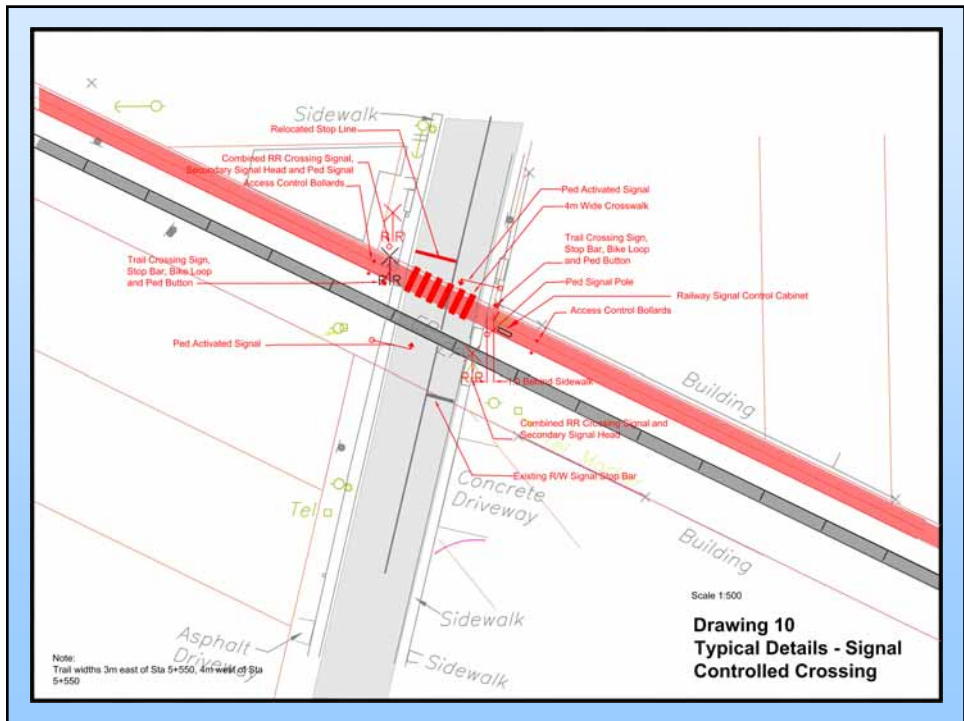
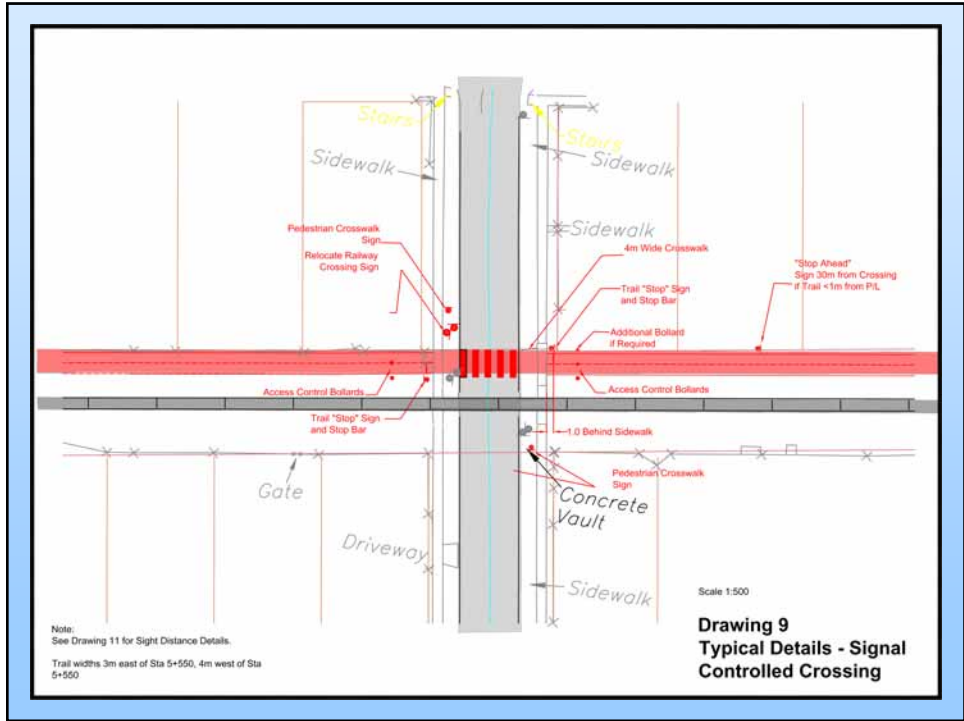
Other Issues

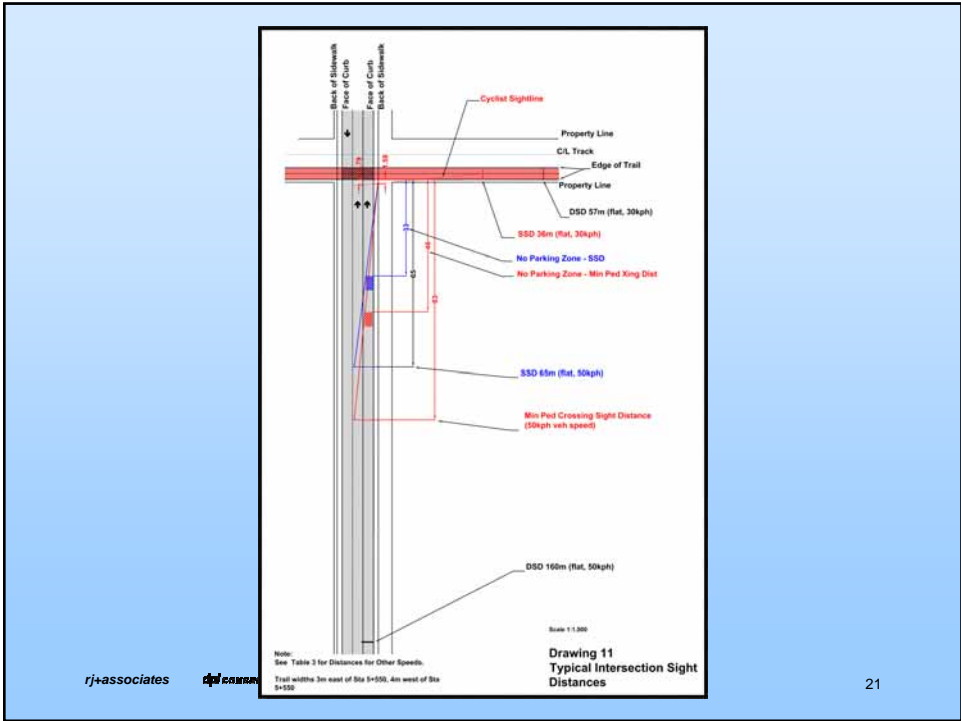
- User Facilities (bike racks, benches etc.)
- Signing (comply with MUTCDC and TAC Bike Sign Manual)
- Future Rail and/or Busway Use
- Emergency Access











21

