A North Augusta Road

Interchange Alternatives

LEGEND
- New roadway
- Property required
- Limit of MTO right of way
- Traffic Signal

1

Minor Improvements

Advantages
- Similar traffic capacity to Parclo A4 configuration
- Smaller footprint than standard Parclo A4 configuration
- No anticipated property impacts
- Suitable where the through movements on crossing road are high
- Lowest construction costs compared to other alternatives
- Typical construction staging is anticipated

Disadvantages
- Non-standard interchange configuration in Ontario
- Contradicts driver expectation to enter and exit highway at Parkedale Road
- Ramp radii do not meet current MTO standards
- Ramps terminals require signalization
- Reduced intersection spacing between Parkedale Road and ramp terminal intersection compared to SPUI
- Potential for left-turn conflicts and potential for higher collision severity
- Does not work well in locations where the left-turn movements on the crossing road are high

2

Diamond

Advantages
- Standard interchange configuration in Ontario
- Smaller footprint than Parclo A4 configuration
- No anticipated property impacts
- Suitable where the through movements on crossing road are high
- Lower cost compared to Parclo A4 configuration
- Typical construction staging is anticipated

Disadvantages
- Lower traffic capacity than a Parclo A4 configuration
- Ramps terminals require signalization
- Reduced intersection spacing between Parkedale Road and ramp terminal intersection compared to SPUI
- Potential for left-turn conflicts and potential for higher collision severity
- Does not work well in locations where the left-turn movements on the crossing road are high

3

Diamond with Roundabouts

Advantages
- Higher traffic capacity compared to Diamond configuration
- Smaller footprint than Parclo A4 configuration
- No anticipated property impacts
- Ramps terminals do not require signalization
- Roundabouts eliminate left-turn conflicts and potentially reduce collision severity
- Suitable where the through movements on crossing road are high

Disadvantages
- Non-standard interchange configuration in Ontario
- Reduced intersection spacing between Parkedale Road and ramp terminal intersection compared to SPUI
- Does not work well in locations where the left-turn movements on the crossing road are high
- Higher cost compared to Diamond configuration
- Requires complex construction staging

4

Parclo A4

Advantages
- Higher traffic capacity compared to Diamond configuration
- Standard interchange configuration in Ontario
- Direct ramps eliminate left-turn conflicts and potentially reduce collision severity
- Suitable where the through movements on crossing road are high
- Works well in locations where the left-turn movement on the crossing road are high volume
- Typical construction staging is anticipated

Disadvantages
- Contradicts driver expectation to exit highway at Parkedale Road
- Larger footprint than Diamond interchange
- Minor property impacts
- Ramp terminals require signalization
- Reduced intersection spacing between Parkedale Road and ramp terminal intersection compared to SPUI
- Higher cost compared to Diamond configuration

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Diverging Diamond

Advantages
- Potential for higher traffic capacity compared to standard Diamond configuration
- Smaller footprint than Parclo A4 configuration
- Intersection configuration eliminates left-turn conflicts and potentially reduces collision severity
- Works well in locations where the left-turn movements on the crossing road are high

Disadvantages
- Non-standard interchange configuration in Ontario
- Ramp terminals require signalization
- Reduced intersection spacing between Parkedale Road and ramp terminal intersection compared to SPUI
- Not suitable where the through movements on crossing road are high
- Higher cost compared to Parclo A4 configuration
- Requires complex construction staging

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Single Point Urban Intersection

Advantages
- Higher traffic capacity compared to standard Diamond configuration
- Smaller footprint than Parclo A4 configuration
- No anticipated property impacts
- Single intersection with traffic signals to control all traffic
- Increased intersection spacing between Parkedale Road and ramp terminal intersection
- Suitable where the through movements on crossing road are high
- Works well in locations where the left-turn movements on the crossing road are high

Disadvantages
- Non-standard interchange configuration in Ontario
- Potential for left-turn conflicts and potential for higher collision severity
- Higher cost compared to Parclo A4 configuration
- Requires complex construction staging