Stewart Boulevard

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
- Ramp radii do not meet current MTO standards
- Ramp terminals require signalization
- 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
- Potential for left-turn conflicts and potential for higher collision severity
- Does not work well in locations where there left-turn movements on the crossing road are high

Alternative 2 is screened-out from further consideration because the interchange cannot accommodate the anticipated 2044 traffic volumes.

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
- Does not work well in locations where there left-turn movements on the crossing road are high
- Higher cost compared to Diamond configuration
- Requires complex construction staging

Alternative 3 is screened-out from further consideration because the interchange cannot accommodate the anticipated 2044 traffic volumes.

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 there left-turn movement on the crossing road are high volume
- Typical construction staging is anticipated

Disadvantages
- Larger footprint than Diamond interchange
- Requires acquisition of the Days Inn property
- Ramps terminals require signalization
- Higher cost compared to Diamond configuration

5

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
- Significant impacts to the Days Inn property
- Ramp terminals require signalization
- Not suitable where the through movements on crossing road are high
- Higher cost compared to Parclo A4 configuration
- Requires complex construction staging

6

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