Ontario’s Rapid Installation of Concrete Rigid Frame Bridges

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The Ministry of Transportation of Ontario (MTO)

- The highway authority for the Province of Ontario in Canada
- Split into 5 regions
History of Rapid Replacement in Eastern Region

- Island Park Drive Overpass, site 3-48
- Site located along Highway 417 in Ottawa, Ontario
- First rapid superstructure replacement using SPMTs by MTO in 2007
- 17 hour full closure
History of Rapid Replacement in Eastern Region

Single Span: 13
Multiple Span: 3
Rigid Frame: 2
Cornwall Centre Road
Project Background

- 26 rigid frame overpass structures requiring replacement along Highway 417 in Ottawa, Ontario
- AADT is over 160,000 along this section of Highway 417
Cornwall Centre Road
Project Background

Fairmont Ave. Overpass EBL

Bank St. Overpass WBL
Cornwall Centre Road

Project Background

- Develop ABC methodology at lower risk site
- Gain experience for future rigid frame rapid replacements
Cornwall Centre Road History

<table>
<thead>
<tr>
<th>Structure Name</th>
<th>Cornwall Centre Road Overpass</th>
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</thead>
<tbody>
<tr>
<td>Structure Type</td>
<td>Steel I Beam</td>
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<tr>
<td>Highway Number</td>
<td>401</td>
</tr>
<tr>
<td>Year Built (age)</td>
<td>1962</td>
</tr>
<tr>
<td>Rehab History</td>
<td>1994- WPR, Joint Modification, Barrier Wall 1997- Coating</td>
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<tr>
<td>AADT</td>
<td>23,000</td>
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Decision to replace based on condition of substructure and retaining walls