Features & Benefits of the Optimized Series

- Complete system – precast foundations, units, headwalls and wingwalls
- Rapid installation
- Material savings – concrete and steel
- Lighter piece weights or longer lay lengths for most projects
- Cost savings
- Outward horizontal reactions – one-sided keyway, reduced forming and grouting
- Maximized clear span and clear distance between footings
- Lower maintenance cost
- Proven design methodology
- Total reliability

ABC is bridge construction that uses innovative planning, design, materials and construction methods in a safe and cost-effective manner to reduce the onsite construction time that occurs when building new bridges or replacing and rehabilitative existing bridges.

**Benefits to You**

- Provides ease and speed of installation
- Alleviates hazardous working conditions
- Trapezoidal foundation reduces wingwall concrete quantities
- Minimal reinforcement to be placed on site
- Pick weights and sizes customized to your equipment

**Construction Process**

1. Excavate and prepare foundation subgrade
2. Unload and place precast foundation sections
3. Place minimal reinforcing at joints to provide foundation continuity
4. Set precast bridge units, headwalls and wingwalls
5. Fill cells with cast-in-place concrete
6. Seal joints, grout wingwalls and backfill

**Design Challenges**

<table>
<thead>
<tr>
<th></th>
<th>O-Series</th>
<th>B-Series</th>
<th>% Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Span (ft)</td>
<td>25</td>
<td>28</td>
<td>-11%</td>
</tr>
<tr>
<td>Rise (ft)</td>
<td>5</td>
<td>6</td>
<td>-17%</td>
</tr>
<tr>
<td>WW Area (ft²)</td>
<td>1.96</td>
<td>2.84</td>
<td>-31%</td>
</tr>
<tr>
<td>Steel (lb/ft)</td>
<td>108</td>
<td>211</td>
<td>-49%</td>
</tr>
<tr>
<td>Piece lay length (ft)</td>
<td>3</td>
<td>4</td>
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<td>17.04</td>
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**O-Series B-Series % Diff**

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**ACCELERATED BRIDGE CONSTRUCTION**

ABC is bridge construction that uses innovative planning, design, materials and construction methods in a safe and cost-effective manner to reduce the onsite construction time that occurs when building new bridges or replacing and rehabilitative existing bridges.

**ABC improves**

- Site constructability
- Total project delivery time
- Work zone safety for the traveling public

**ABC reduces**

- Traffic impacts
- Onsite construction time
- Weather-related time delays

**Features & Benefits of the Optimized Series**

- Complete system – precast foundations, units, headwalls and wingwalls
- Rapid installation
- Material savings – concrete and steel
- Lighter piece weights or longer lay lengths for most projects
- Cost savings
- Outward horizontal reactions – one-sided keyway, reduced forming and grouting
- Maximized clear span and clear distance between footings
- Lower maintenance cost
- Proven design methodology
- Total reliability

**ABC**

A precast foundation system that blends the speed of precast with the economy of cast-in-place concrete.

**Benefits to You**

- Provides ease and speed of installation
- Alleviates hazardous working conditions
- Trapezoidal foundation reduces wingwall concrete quantities
- Minimal reinforcement to be placed on site
- Pick weights and sizes customized to your equipment