Projects

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Prepared by Transportation Planning Missouri Department of Transportation

Barrier Saddle <u>Video</u>



Description

Years ago, the median of I-70 was closed in. Grated inlets in the median had Type C Concrete Median Barrier slip formed over them. A cut-out in the concrete was made to allow water to drain into the inlets, but it was impossible for maintenance to remove the grate to clean out the inlet with a suck/vac truck. Over time, the inlets became plugged with debris and resulted in standing water on the inside shoulder and fast lane. The Barrier Gap Protection Assembly (BGPA aka Barrier Saddle) allows a four feet section of concrete median barrier to be removed to allow access to routinely, effectively and safely clean out the inlets. The gap in the concrete barrier is permanently protected by the Barrier Gap Protection Assembly which can be unbolted, section by section, to gain full access to remove the grate and clean the inlet.

Benefit

Plugged inlets cause standing water in the shoulder and fast lane. By having access to clean out the inlets, allows the maintenance crews to quickly and safely clean the inlets. In one shift, the barrier saddle can be disassembled, the grate removed, the inlet cleaned and everything reassembled. Originally, the plan was going to be to remove the section of barrier, clean the inlet, then pour the barrier back the way it had been. This would be a onetime cleaning. The price of the barrier saddle, plus installation cost less money than the original plan.

Materials and Labor

For the 13 locations the barrier saddle was added, the total cost of materials was \$10,465 with zero reoccurring costs.

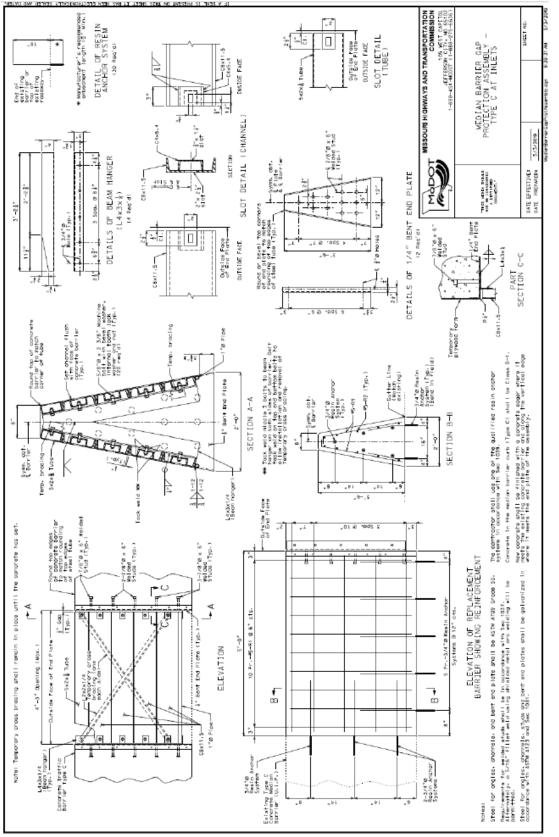
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Additional information, photos or videos can be seen by accessing Innovations Challenge SharePoint page at: <u>http://sp/sites/tp/planpol/SitePages/InnovationHome.aspx</u>





This was intended, and designed, to be installed as a preassembled unit. The concrete is cast to the unit in the field assuring all bolted pieces align perfectly. This guarantees perfect alignment for ease of dismantling and reassembling in the field.