## Multnomah County Willamette River Bridges Capital Improvement Plan



Project Summary Information: Electrical System Master Control Switch Installation and Miscellaneous Operator House Improvements								
Bridge Names(s): Broad	dway		Project ID#:	BUN-BR-03	Project Status:	In Progress		
Project Rank: 43	Primary Category of Work Electrical and Lighting	Performan	ce Attribute Total Sco	re 8	Importance Score	TI-4 18.66		
Logical Grouping Project ID #'s:	BR-MECH-05, BR-ELEC-01							
Bridge Num and Names(s):	06757 Willamette River, Broadway St [Broadway]							
Definition of Problem	e required over the next 20 years to ensure the reliability of t							

Numerous electrical repairs will be required over the next 20 years to ensure the reliability of the bridge machinery control system. A machinery master shut off switch should be installed, and safety warning labeling should be provided to advise employees of electrical hazards. In addition to the electrical needs, the bridge's operator house does not have running water during the winter months due to the exposed piping's vulnerability to freezing temperatures. This requires Multnomah County to regularly bring water to the operator house during the winter months.

## **Description of Proposed Solution**

The electrical work will include the installation of wearing components, a master electrical system disconnect switch, and electrical hazard labeling. A heat system will be installed on the water and sewer piping to keep it warm enough to be used year around.

## **Project Justification**

The electrical rehabilitation will provide greater safety and reliability to the bridge power and control systems for both users of the bridge and its operators. Electrical maintenance helps maintain reliable operation of the bridge. Updated drawings and documentation will assist in troubleshooting if a problem arises with the electrical system. The heat system will eliminate the cost of bringing water to the bridge during the winter months.

Right-of-Way:	\$0	Notes:
Utility Reimbusement:	\$0	None entered.
Construction:	\$204,918	
Preliminary Engineering:	\$51,229	
Construction Engineering:	\$51,229	
Total Cost at Target Construction Time:	\$307,377	
Target Construction Time:	2030-2034	]