Multnomah County Willamette River Bridges Capital Improvement Plan



Project Summary Information: Broadway Bridge West Approach Structural Rehabilitation and Paint								
Bridge Names(s): Broad	way			Project ID#:	BUN-BR-09	Project Status:	In Progress	
Project Rank: 18	Primary Category of Work	Paint	Performan	ce Attribute Total Sco	ore 20	Importance Score	TI-2 21.49	
Logical Grouping Project ID #'s:	BR-STRUCT-13 and BR-PAIN	T-01						
Bridge Num and Names(s): 06757A NW Broadway Ramp over Broadway St Conn [Broadway] ; 06757 Willamette River, Broadway St [Broadway]								
Definition of Problem								

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The Multnomah County Willamette River Bridges Capital Improvement Plan Consultant Team identified protective paint system deterioration for the Broadway Bridge West Approach and Span 1 of the River Bridge. These findings were based on a visual inspection of the structure, an assessment of previous inspection reports, and an understanding of past paint projects. Based on the era of the paint system, it is assumed to contain lead. Observed steel and concrete member degradation included up to 3/8" section loss for steel components, bent bearing device anchor bolts, and reinforcing steel corrosion including section loss. Main span piers adjacent to the railroad are located within the horizontal clearance requirements for the railroad and are vulnerable to train collision damage.

Description of Proposed Solution

The proposed solution for the deteriorating and failing paint systems include the removal of existing lead based paint, surface preparation, and application of a new protective paint system. The project will replace any degraded or damaged concrete with structural concrete patching, and replace bent bearing device anchor bolts. The project will also construct railroad crash walls to protect main spans piers adjacent to the UPRR tracks.

Project Justification

The main benefits of completing the proposed paint system repairs are to arrest the ongoing corrosion and deterioration of the structural steel members, and to restore a protective paint system which would extend the service life of the bridge. Additionally, the current lead paint system would be removed to reduce the health exposure risk to maintenance staff and a potential source for environmental contamination. Bearing device, steel and concrete repairs would address current damage and extend the service life of the bridges. The construction of crash walls adjacent to the railroad will protect the bridge from train collision derailment.



Right-of-Way:	\$191,140	Notes:
Utility Reimbusement:	\$0	None e
Construction:	\$13,697,055	
Preliminary Engineering:	\$3,211,733	
Construction Engineering:	\$3,211,733	
Total Cost at Target Construction Time:	\$20,311,661	
Target Construction Time:	2020-2024	

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