



Bridge with Unknown Foundation Scour Plan of Action

In Case of Emergency, Call UDOT Traffic Operations Center (801) 887-3710
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Date Updated:

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Bridge Identification

Bridge ID: 053041A
County: WASHINGTON
Year Built: 1950
Route: 0 Milepost: 0
ADT: 32

Feature Intersected: PINTO WASH
Location: PINTO WASH IN PINTO
Latitude: 37.53730556
Longitude: -113.5175833
Facility: COUNTY ROAD

Stream Bed Material

Stream Bed Material: Sand/Silt
Stream Bed Determination Notes: Obtained from documentation
Stream Bed Additional Notes:

Foundation Type and Depth

Based on judgement including bridge age, span, type and inferences from channel crossing (dominant soils, geologic setting, etc.)

<u>Type</u>		<u>Depth</u>	
Foundation Type:	Spread Footings	Foundation Depth (ft):	10
Foundation Type Determination Notes:	From sketches and inspection reports	Foundation Depth Determination Notes:	From sketches and inspection reports
		Reference Scour Depth (ft):	17.7

Hydraulic Overview

Q100 (cu ft/sec): 844
Drainage Area (miles²): 30.43
Q500 (cu ft/sec): 1660
Q500/Q100 (cu ft/sec): 1.967

Scour Evaluation Summary:

The spread footings are exposed up to 2 feet on both abutments. No adequate bank protection is in place under the bridge. High flow events will continue to scour the channel near the abutments until corrective countermeasures are in place. Recommend protecting the abutments with appropriately sized angular riprap. Continue to monitor erosion around the abutments, document the location and extent of any undermining.

Bridge Rating and Coding

Inspection Date:

Item 60-Substructure:

Superstructure:

Deck Rating:

Sufficiency Rating:

Item 61-Channel and Protection:

Existing NBI 113 Scour:

Proposed NBI 113 Scour:

Countermeasure Recommendations

Proposed Countermeasures:

Check Boxes for 'Yes'

- Inspect and Cross Section at the Normal Interval
- Increased Inspection Frequency mo. with cross sections
- Supplemental (fall/winter) inspection with surveyed cross sections indicated
- Additional Structural Countermeasures

Are there any structural countermeasures such as riprap, etc. recommended?

Structural Scour Countermeasures Options:

Cost:

1.
2.
3.

Monitoring Plan

Check Boxes for 'Yes'

- Monitor During High Flood Events
- Overtopping of Channel Banks

Monitoring Plan Description:

Monitoring Plan Summary:

Bridge Closure Plan

Closure Plan Summary

Criteria for Immediate Bridge Closure by Field Staff

- Observed overtopping of structure.
- Observed overtopping of the approach roadway.
- Scour is estimated to be below the bottom of the spread footing.
- Gross debris obstructing the bridge opening.
- Confirmed movement of the substructure unit.

Criteria for Reopening the Bridge to Traffic

- Verify that the substructure units have not been adversely affected.
- Removal of excessive debris from channel.
- Verify condition of any required structural countermeasures.

Review Criteria Team:

Hydraulics

Geotechnical

Structures

Photo #1



Characteristic Bridge Photo

Photo #2



North abutment, footing is exposed.

Photo #3



South abutment, footing is exposed.

Photo #4



Upstream channel condition.