

UNDERWATER INSPECTION REPORT

BRIDGE NAME:	Waverley Lake Outlet	REGION:	2	BRIDGE NUMBER:	43C08	
RIVER NAME:	Cox Creek	OWNER:	City of Albany	DISTRICT:	4	
STATE HWY #:		ROUTE NUMBER:		MILE POINT:	0	
COUNTY:	Linn	ROAD NAME:	Salem Ave.		VISIBILITY (Ft.):	1
FOUNDATION TYPE:		ACCESS:	3&2	WATER TEMP:	55	
DIVERS:	Shorb, J.Ottosen, Goff, Boothe		INS. INTERVAL:	1	MAXIMUM DEPTH:	10-ft.
Water Elevation	Lake elevation was at 0.7-ft. on elevation board. Stream was 3.0' above top of apron (see sketch)					

GENERAL NOTES:

This structure spans the outlet of Waverley Lake. There are two concrete abutments and a water level control dam and spillway incorporated across the upstream edge of the structure.

The element description provided in the general notes will be used to establish the appropriate underwater bridge inspection procedures, as provided in Section 8 of the ODOT Underwater Bridge Inspection Manual.

Underwater Bridge specific safety Hazards:

Visibility, Drift, fast current, Weir, Steep bank access, Loose riprap

UNDERWATER ELEMENT CONDITION STATES:						CONDITION STATES			
Elem.	Description:	Defects:	Environment	Qty	Units	1	2	3	4
215	Concrete Abutment-Bent #1		Moderate	35	LF	6	29	6	0
	1120	Efflorescences		3	LF	0	3	0	0
	1180	Abrasion		26	LF	0	26	0	0
221	Concrete Spread Footing-Bent #1		Moderate	90	LF	85	0	5	0
	6000	Scour		5	LF	85	0	5	0
215	Concrete Abutment-Bent #2		Moderate	35	LF	0	27	8	0
	1130	Cracks		2	LF	0	0	2	0
	1180	Abrasion		26	LF	0	27	0	0
221	Concrete Spread Footing-Bent #2		Moderate	90	LF	83	0	0	7
	6000	Scour		7	LF	0	0	0	7

ELEMENT DEFECTS:

Bent	Elem.	Defect:
1	215	1120 The abutment has 3-LF of C/2 Efflorescence.
1	215	1180 The abutment has C/2 abrasion full length, due to hierarchy leaves 26-LF in C/2 Abrasion.
2	215	1130 There are two areas with C/3 cracking, see sketch. 7-LF total, but due to hierarchy with the cracks overlapping the scour only 2-LF of C/3 cracking.
2	215	1180 The abutment has C/2 abrasion full length, due to hierarchy leaves 27-LF in C/2 Abrasion.
2-3	221	6000 The edge of the dam apron that runs between the two bridge abutments is undermined full-length with a maximum of 4.2-ft. horizontally and 1.0-ft. vertical. No footing plans were available so spread footing sizes are an assumed perimeter length of 90-LF at each bent. Bent 1 has what appears to be 5-LF of footing edges exposed and Bent 2 has 7-LF of undermining (see sketch).

NBI Ratings

<i>Item</i>	<i>Description:</i>	<i>Current Rating</i>	<i>Condition Rating</i>
BC09	Channel Condition Rating		7
BC10	Channel Protection Condition Rating		4
BC11	Observed Scour Condition Rating		4
BC15	Underwater Condition Rating		4

NBI Item BC 09 Some minor debris/erosion.

NBI Item BC 10 Widespread moderate and isolated major undermining of spillway.

NBI Item BC 11 Isolated major scour at Bent 2.

NBI Item BC 15 Isolated major scour at Bent 2.

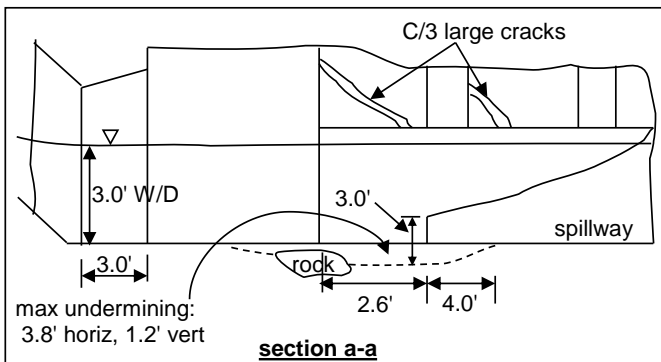
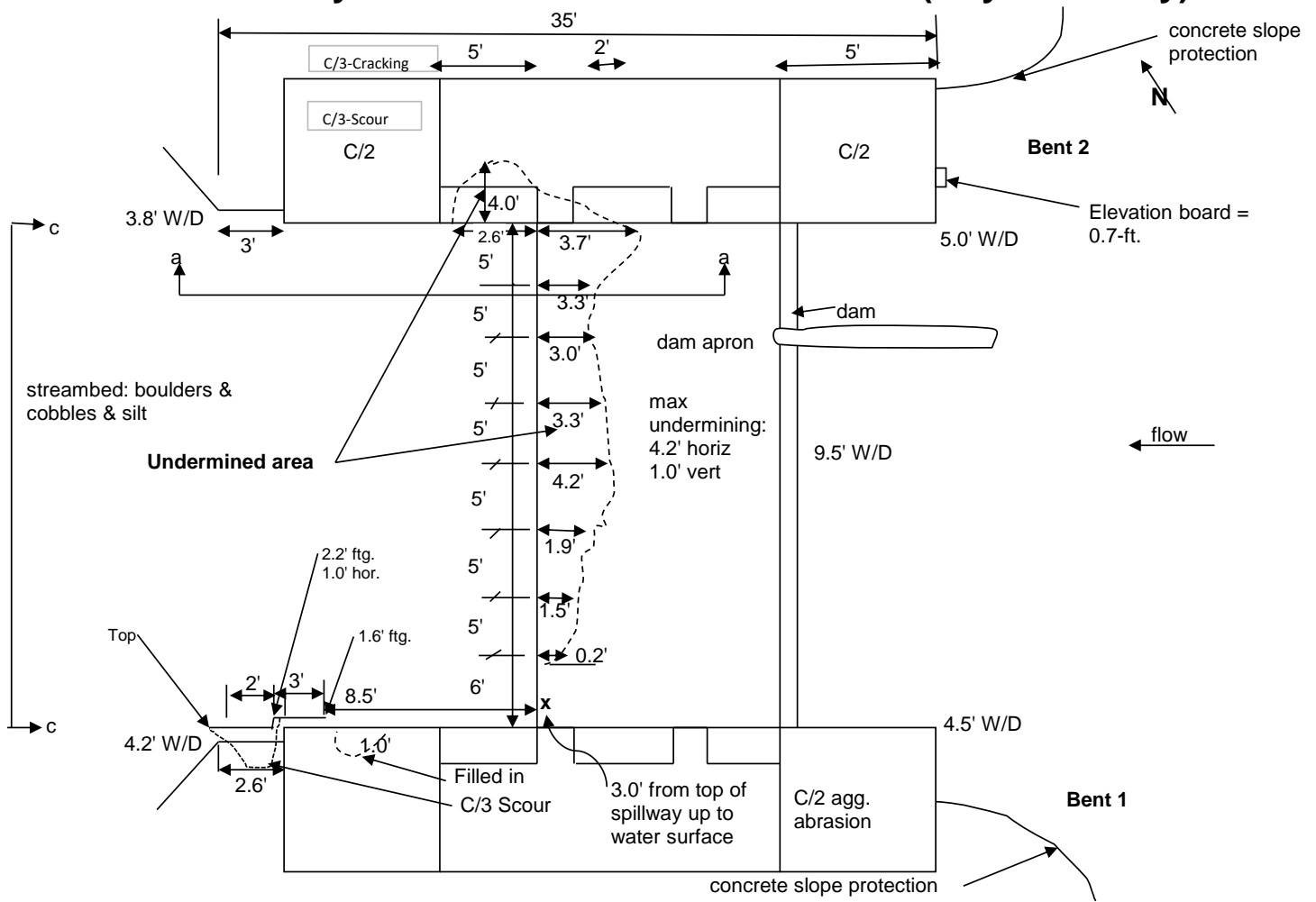
Maintenance Recommendations:

Elem. Description:

220 Some form of scour protection should be considered to prevent additional scour under the spillway apron and abutments.

Jason Ottosen, P.E.
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43C08 Waverly Lake Outlet - Salem Ave MP 0.0 (City of Albany)



distance from top of apron down to streambed, bottom of apron is very irregular.	3.0'	3.2'	3.3'	3.4'	3.8'	3.4'	3.2'	2.9'	3.0'
horizontal amount of undermining	3.7'	3.3'	3.0'	3.3'	4.2'	1.9'	1.5'	0.2'	
vertical amount of undermining	0.1'	0.1'	0.4'	0.5'	1.0'	0.8'	0.7'	0.2'	

