

# Bridge Inspection Report



**Bridge Name :** Kopu Bridge      **Highway :** 25      **Bridge No.:** 220      **R.P. :** 12/10.54  
**Spans :** 2/18.1 19/18.3 2/18.5 2/21.4      **Width Btw Kerbs/Guardrails :** 3.66/      **Length:** 465.4  
**Type of bridge :** RSJ beams, RC insitu deck      **Year of Construction :** 1926      **Restrictions :** One lane  
**Inspected by :** CC      **Date :** 16/02/2006      **Reviewed by :** GRG      **Date :** 14/09/2006

## Check List

GENERAL				SUPERSTRUCTURE STEEL			FOUNDATIONS AND SUBSTRUCTURE			
1	Appearance	1	15	Condition of Paint	2	26 1	Settlement of Abutments	1		
2	Approach Adequacy	1	16	Corrosion	2	26 2	Soil Settlement Under Pilecap	1		
3	Signs	1	17	Joints	1	27	Cracking	3		
4	Vibration	1	18	Rivets and Bolts	1	28	Spalling	2		
5	Bearings	3	19	Other defects	1	29	Abrasion	1		
6	HD Bolts & Linkages	1				30	Corrosion of Steel	1		
7	Expansion Joints	1				31	Other Defects	1		
8	Footways	N				<b>SCOUR AND WATERWAY</b>				
9	Hand / Guardrails	3								
10	Deck Drainage	1				32	River Agrading	1		
						33	River Degrading	1		
						34	Waterway Adequate	1		
						35	Erosion of abuts / approach	1		
						36	Embedment of Foundations	1		
						37	Other Erosion / Scour Risks	1		
<b>SUPERSTRUCTURE CONCRETE</b>				<b>SUPERSTRUCTURE TIMBER</b>			<b>MARKING CODE</b>			
11	Cracking	2	N	21	Warping and Cracking	1	37	Other Erosion / Scour Risks	1	
12	Spalling	3	N	22	Deck wear	1				
13	Reinf. Corrosion	2	N	23	Bolts and Spikes	4	Not Inspected	0	Routine Maint.	
14	Other defects	1	N	24	Other defects	1	Satisfactory	1	Urgent Maint.	
				25	Date of last boring		Monitor next Insp.	2	Not Applicable	

## COMMENTS AND RECOMMENDATIONS

Item	Brief description of fault and recommendations for repair	Cost Estimate
5	Both abutment seats and most of piers have accumulated road debris build up around bearings. Clean off.	\$1,000.00
9	Several posts and rails decayed and loose, missing bolts and loose top straps. Replace defective posts and rails and tighten loose bolts.	\$6,000.00
11 1	Transverse and longitudinal deck cracking throughout structure. Monitor.	
12 1	Spalling has occurred in numerous location to deck soffit especially around shear cleat connection and near deck end angles with loss of composite action. Breakout defective concrete, treat steel and mortar up.	\$7,000.00
13 1	Exposed steel in spalled areas. Monitor for loss of section of bars.	
15	Breakdown of paint and corrosion occurring throughout superstructure mostly in the bottom flanges of beams & bracing/diaphragms. Monitor.	
16	Refer to item 15.	
23	New baulk loose (4m from pier P) requiring urgent repair. Add more inter baulk connections at mid deck span and tighten down clamps below.	\$2,000.00
27	Cracking to various piers (pier H end of beam 3 in particular). Epoxy inject cracking to pier H.	\$1,000.00
28	Spalling present at various locations on piers. Monitor.	
Has Remedial Work Recommended in last Inspection been carried out : No		
Comment if Answer is No :		
Does the Bridge Descriptive Inventory require changes? Yes		
Comment if Answer is Yes : BSN.		

## FUTURE MANAGEMENT

Item	Defect / Strategy	Bridge Insp.Engineer	Date
	Underside of structure inspected using boat access, topside inspected on foot using bays to avoid live traffic.		